

Service Manual

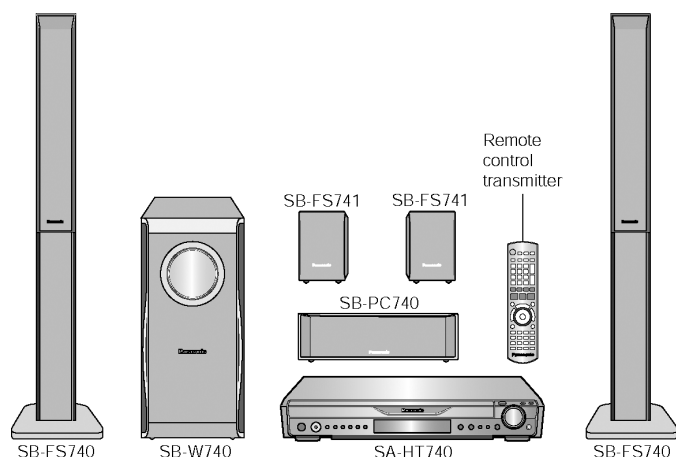
DVD Home Theater Sound System



SA-HT740P
SA-HT740PC

Colour

(S).....Silver Type



Specifications

General

Power Source:	AC 120V, 60Hz
Power consumption:	140 W
Dimensions (W×H×D):	430×70×439.2 mm (16-15/16"×2-3/4"×17-19/64")
Mass:	5 kg (11.02lbs)

Amplifier section

RMS Output Power: Dolby Digital Mode

Total RMS Dolby Digital

mode Power: 1000 W

At 1kHz and total harmonic of 10%

IFront:	90 W/ Channel (4Ω)
ICenter:	320 W/ Channel (4Ω)
ISurround:	90 W/ Channel (4Ω)

At 100Hz and total harmonic of 10%

IActive subwoofers: 320 W/ Channel (4Ω)

FTC Output Power: Dolby Digital Mode:

ITotal FTC Dolby Digital mode Power:
740 W

At 120Hz-20kHz and total harmonic of 1%

IFront:	60 W/ Channel (4Ω)
ICenter:	250 W/ Channel (4Ω)

ISurround: 60 W/ Channel (4Ω)

At 45Hz-120Hz and total harmonic of 1%

ISubwoofer: 250 W/ Channel (4Ω)

IFM tuner section

Frequency Range: 87.9-107.9MHz
(200kHz in step)
87.5-108.0MHz
(100kHz in step)

Sensitivity: 2.5μV (IHF)

S/N 26dB 2.2μV

Antenna Terminals: 75Ω (unbalanced)

IAM tuner section

Frequency Range: 520-1710kHz (10kHz in step)

AM Sensitivity S/N 20dB at 1000kHz: 560μV/m

IPhone Jack:

Terminal: Stereo 3.5 mm (1/8") jack

IFront M. Port:

Sensitivity: 100mV (4.7kΩ)

Terminal (Input): Stereo 3.5 mm (1/8") jack

IDisc section

Discs played [8 cm (3") or 12 cm (5")]:

Panasonic

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- (1) DVD-RAM (DVD-VR compatible, JPEG formatted discs)
- (2) DVD-Audio
- (3) DVD-Video
- (4) DVD-R, DVD-RW (DVD-Video, DVD-VR compatible)
+R, +RW (Video compatible)
- (5) CD-Audio (CD-DA)
- (6) Video CD
- (7) SVCD (Conforming to IEC62107)
- (8) CD-R/CD-RW (CD-DA, Video-CD, SVCD, MP3, WMA, JPEG formatted discs)
- (9) MP3/WMA
IMPEG-1 Layer 3, MPEG-2 Layer3
IWindows Media Audio Ver. 9.0 L3
Not compatible with Multiple Bit Rate (MBR)
IMaximum number of recognizable audio and picture contents and groups:
4000 audio and picture contents and 400 groups
- (10) JPEG
IExif Ver 2.1 JPEG Baseline files
IPicture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:2:2 or 4:2:0). Extremely long and thin pictures may not be displayed.
IMaximum number of recognizable audio and picture contents and groups:
4000 audio and picture contents and 400 groups
- (11) HighMAT Level 2 (Audio and Image)

Pick up:**Wavelength:**

ICD: 785nm

IDVD: 662nm

Laser power:

ICD/DVD: (P) CLASS I/CLASS II

ICD/DVD: (PC) CLASS 1M/CLASS 1

Audio output (DISC):

Number of channels: 5.1 ch (FL, FR, C, SL, SR, SW)

Audio performance:**Frequency response:**

DVD (linear audio): 4 Hz-22 kHz (48 kHz sampling)

4 Hz-44 kHz (96 kHz sampling)

DVD-Audio: 4 Hz-88 kHz (192 kHz sampling)

CD-Audio: 4 Hz-20 kHz

S/N ratio:

CD-Audio: 105 dB

Dynamic range:

DVD (linear audio): 95 dB

CD-Audio: 93 dB

Total harmonic distortion:

CD-Audio: 0.005 %

IVideo section**Video system:**

Signal system: NTSC

Composite video output:Output level: 1 Vp-p (75 Ω)**Terminal:** Pin jack (1 system)**S-video output:****Y output level:** 1 Vp-p (75 Ω)**C output level:** NTSC; 0.286 Vp-p (75 Ω)**Terminal:** S terminal (1 system)**Component video output (480p/480i):****Y output level:** 1 Vp-p (75 Ω)**P_B output level:** 0.7 Vp-p (75 Ω)**P_R output level:** 0.7 Vp-p (75 Ω)**Terminal:** Pin jack (Y: green, P_B: blue, P_R: red) (1 system)**HDMI AV output:** 19 pin type A connector, HDMI Ver.1.2a (EDID Ver.1.3)**Power consumption in standby mode:**

approx 0.4W

Note:

- Specifications are subject to change without notice.
Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

Solder:

This model uses lead free solder (PbF).

Mechanism:

This model uses RC1 (Rotary tray) mechanism.

System	SC-HT740P	SC-HT740PC
Main unit	SA-HT740P	SA-HT740PC
Speaker system	SB-HT740P	SB-HT740P
Active subwoofer	SB-W740P	SB-W740P*4

Speaker system	SB-HT740P
Front speakers	SB-FS740P*1
Center speaker	SB-PC740P*2
Surround speakers	SB-FS741P*3

Refer to the original service manual for *1, *2, *3, *4.

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.



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HDCCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: In the USA: 5,479,168, 5,638,074, 5,640,161, 5,808,574, 5,838,274, 5,854,600, 5,864,311, 5,872,531, and in Australia: 669114, with other patents pending.

■ Built-in decoders

You can play discs with these symbols.



⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

CONTENTS

	Page		Page
1 Safety Precautions	5	9.4. Sales Demonstration Lock Function	29
1.1. GENERAL GUIDELINES	5	9.5. Service Precautions	30
1.2. Before Repair and Adjustment	5	10 Assembling and Disassembling	31
1.3. Protection Circuitry	6	10.1. Disassembly Flow Chart	32
2 Prevention of Electro Static Discharge (ESD) to		10.2. Main Components and P.C.B. Locations	32
Electrostatically Sensitive (ES) Devices	6	10.3. Disassembling the Top Cabinet	33
3 Precaution of Laser Diode	8	10.4. Disassembling the Front Panel Assembly	33
4 About Lead Free Solder (PbF)	8	10.5. Disassembling the Tray Assembly	33
5 Handling Precautions for Traverse Unit	9	10.6. Disassembling the Rear Panel	34
5.1. Cautions to Be Taken in Handling the Optical Pickup Unit	9	10.7. Disassembling the Mechanism Base Assembly	34
5.2. Grounding for electrostatic breakdown prevention	9	10.8. Disassembling the FL & Head phone P.C.B.	34
6 Accessories	11	10.9. Disassembling the HDMI Module P.C.B.	35
7 Operation Procedures	12	10.10. Disassembling the Regulator P.C.B.	35
7.1. Remote Control Keys Operation	12	10.11. Disassembling the Main P.C.B.	35
7.2. Main Unit Keys Operation	13	10.12. Disassembling the AC-Inlet, Power & Sub Power P.C.B.	35
7.3. Disc information	14	10.13. Disassembly of Digital Amp IC	36
8 New Features	16	10.14. Disassembly of Regulator IC	36
8.1. Using of Receiver Unit (SH-FX60 / SH-FX80)	16	10.15. Disassembly of Switch Regulator IC (IC5701)	36
8.2. About HDMI	20	10.16. Disassembly of the Tray Base Guide (L) and Tray Base	
9 Self-Diagnosis and special mode setting	22	Guide (R)	37
9.1. Service Mode Summary Table	22	10.17. Disassembly of the Rotary Tray	37
9.2. Service Mode Table 1	22	10.18. Disassembly of the Traverse Unit	38
9.3. DVD Self Diagnostic Function-Error Code	27	10.19. Assembly of Tray Assembly	40

11 Service Fixture and Tools	42	18.5. (D) Loading Motor, Tray Motor, Sensor & Regulator Circuit	79
12 Service Positions	42	19 Printed Circuit Board	81
12.1. Checking & Repair Main P.C.B., Power P.C.B., HDMI Module P.C.B., FL and Head phone P.C.B.	42	19.1. (A) HDMI Module P.C.B.	81
13 Measurements and Adjustments	43	19.2. (B) Main, AC-inlet & Sub-power P.C.B.	82
13.1. Service Tools and Equipment	43	19.3. (C) Power P.C.B.	83
13.2. Important points in adjustment	43	19.4. (E) FL, Headphone, Loading motor, Tray motor, Sensor & Regulator P.C.B.	84
13.3. Storing and handling of test discs	43	20 Basic Troubleshooting Guide	85
13.4. Optical adjustment	44	20.1. Basic Troubleshooting Guide for Traverse Unit (HDMI Module P.C.B.)	85
13.5. Abbreviations	45	20.2. Basic Troubleshooting Guide for HDMI AV output	86
14 Voltage and Waveform Chart	47	21 Overall Block Diagram for HT740	87
14.1. HDMI Module P.C.B.	47	21.1. HT740 DVD Unit Block Diagram	88
14.2. Main P.C.B.	49	21.2. HT740 Block Diagram (Analog Signal : DVD 5.1ch Play Back Mode)	89
14.3. Power P.C.B.	50	21.3. HT740 Block Diagram (Analog Signal : 2ch Analog Input Mode)	90
14.4. FL P.C.B.	50	22 Terminal Function of ICs	91
14.5. Loading Motor P.C.B., Tray Motor P.C.B., Sensor P.C.B., Regulator P.C.B.	51	22.1. IC2001 (MN101C49GHF): Operation CPU	91
14.6. Waveform Chart	52	23 Explode Views	92
15 Illustration of IC's, Transistors and Diodes	53	23.1. Cabinet Parts Location	92
16 Wiring Connection Diagram	55	23.2. Packaging	95
17 Block Diagram	57	24 Replacement Parts List	96
18 Schematic Diagram	63	24.1. Component Parts List	97
18.1. (A) HDMI Module Circuit	64		
18.2. (B) Main Circuit	70		
18.3. (C) Power Circuit	75		
18.4. (C) Panel Circuit	78		

1 Safety Precautions

1.1. GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, carry out the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1. LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1M\Omega$ and $5.2M\Omega$.
When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

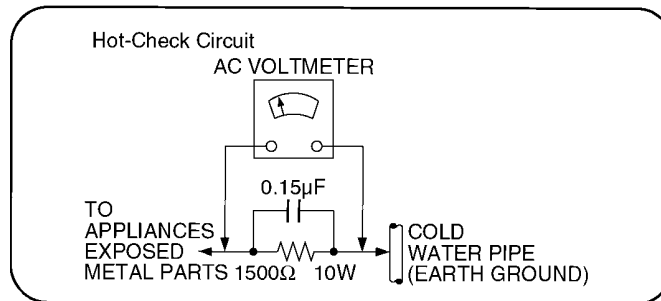


Figure 1

1.1.2. LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

1.2. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C5736, C5737, C5741, C5742 through a 10 Ω, 10 W resistor to ground. DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 120 V, 60 Hz in NO SIGNAL mode volume minimal should be ~ 750 mA.

1.2.1. Caution for fuse replacement

(For English)

CAUTION:

Replace with the same type fuse:
(Manufacturer: LITTELFUSE, INC, Type: F1, 8A, 125V)

(For Canadian French)

ATTENTION:

Utiliser un fusible de rechange de mme type:
(Manufacturer: LITTELFUSE, INC, Type: F1, 8A, 125V)

1.3. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.
- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. Turn off the power.
2. Determine the cause of the problem and correct it.
3. Turn on the power once again after one minute.

Note:

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

2 Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

3 Precaution of Laser Diode

CAUTION:

This unit utilizes a class 1 laser.

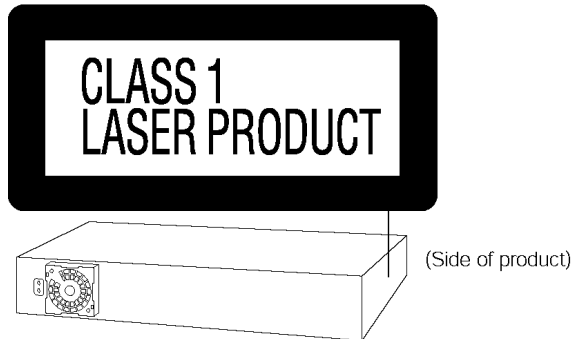
Invisible laser radiation is emitted from the optical pickup lens.

Wavelength: 662nm(DVD)/785nm(CD).

Maximum output radiation power from pickup: 100μW/VDE

When the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the pickup lens.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufacturer's specified replacement pick up only.
6. Use of control or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



The laser product label has not been attached to products for the U.S.A and Canada

CAUTION	- LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class
CAUTION	- CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC20265-1 +A2 Class 1M	
WARNING	- KLASS 1M SYNJUG OCH OSYNJUG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.	
FORSIGTIG	- SYNJUG OG OSYNJUG LASERSTRÅLING KLASS 1M, NÄR LÅGET ER ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	
VARO!	- AVATTAESSA OLET AULTTINA LUOKAN 1M NÄKYVÄÄ JA NÄKYMÄTÖNÄ LASERSTRÄLYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAN SATEESEEN.	
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M, WENN ABDECKUNG GEOFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE, CLASSE 1M, EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT A L'OEIL D'INSTRUMENTS D'OPTIQUE.	
注意	- ここを覗くと可視及び不可視レーザー光が出ます。 ビームを見たり、触れたりしないでください。	
注意	- 打开时有可见及不可见激光辐射。避免光直射。	GB7241.1-2001/GB 类 RCLXS0075

(Inside of product)

CAUTION:

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

4 About Lead Free Solder (PbF)

Distinction of PbF PCB: PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).

When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

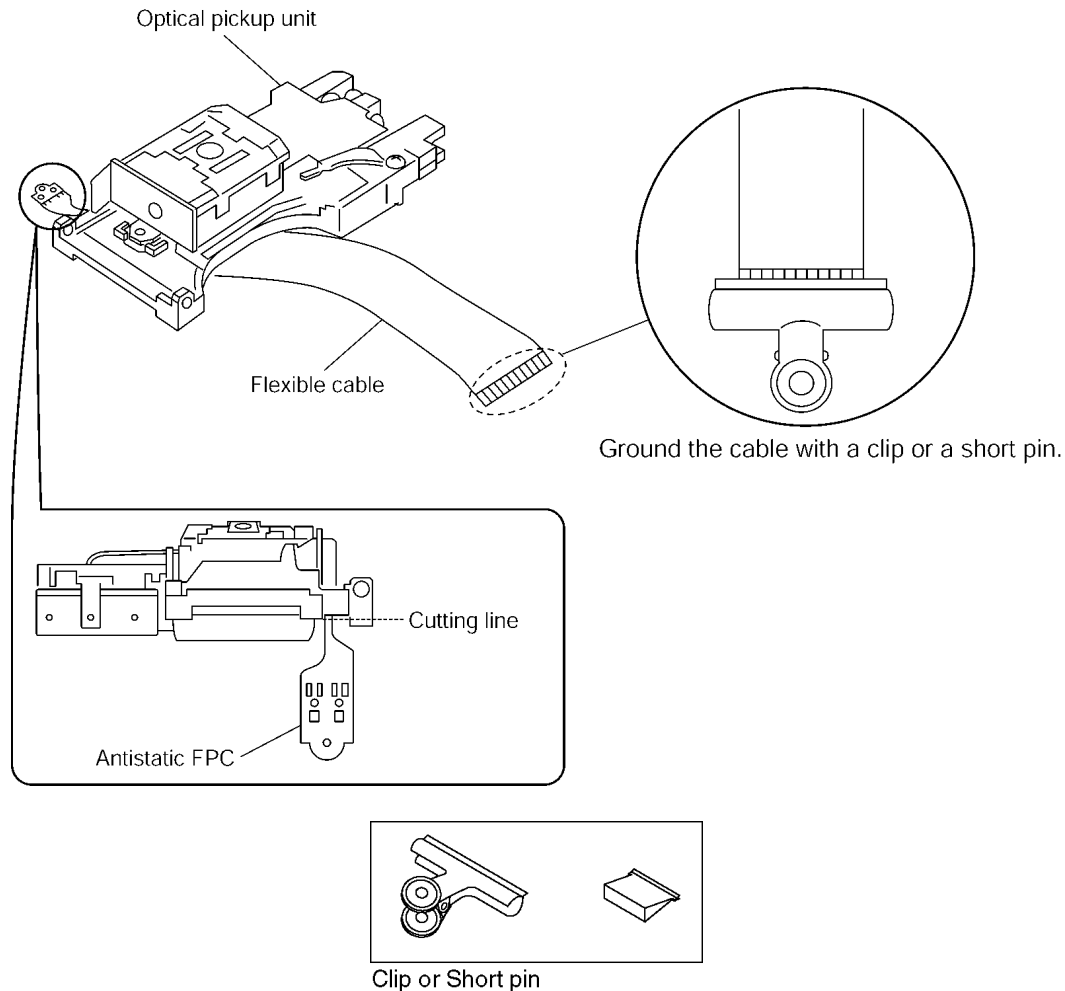
5 Handling Precautions for Traverse Unit

The laser diode in the optical pickup unit may break down due to static electricity of clothes or human body. Special care must be taken avoid caution to electrostatic breakdown when servicing and handling the laser diode.

5.1. Cautions to Be Taken in Handling the Optical Pickup Unit

The laser diode in the optical pickup unit may be damaged due to electrostatic discharge generating from clothes or human body. Special care must be taken avoid caution to electrostatic discharge damage when servicing the laser diode.

1. Do not give a considerable shock to the optical pickup unit as it has an extremely high-precise structure.
2. To prevent the laser diode from the electrostatic discharge damage, the flexible cable of the optical pickup unit removed should be short-circuited with a short pin or a clip.
3. The flexible cable may be cut off if an excessive force is applied to it. Use caution when handling the flexible cable.
4. The antistatic FPC is connected to the new optical pickup unit. After replacing the optical pickup unit and connecting the flexible cable, cut off the antistatic FPC.



5.2. Grounding for electrostatic breakdown prevention

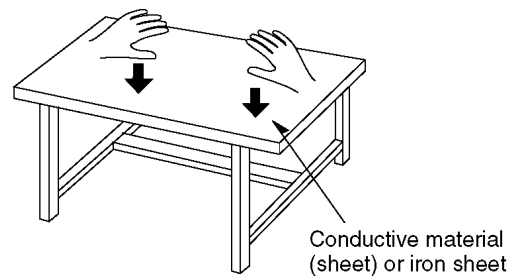
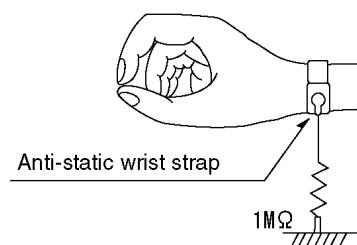
Some devices such as the DVD player use the optical pickup (laser diode) and the optical pickup will be damaged by static electricity in the working environment. Proceed servicing works under the working environment where grounding works is completed.

5.2.1. Worktable grounding

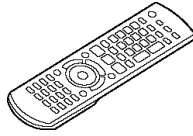
1. Put a conductive material (sheet) or iron sheet on the area where the optical pickup is placed, and ground the sheet.

5.2.2. Human body grounding

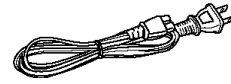
1. Use the anti-static wrist strap to discharge the static electricity form your body.



6 Accessories



Remote control



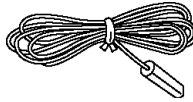
AC cord



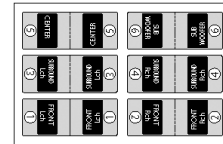
AM loop antenna



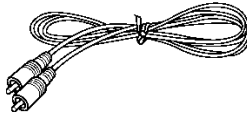
Speaker cable



FM indoor antenna



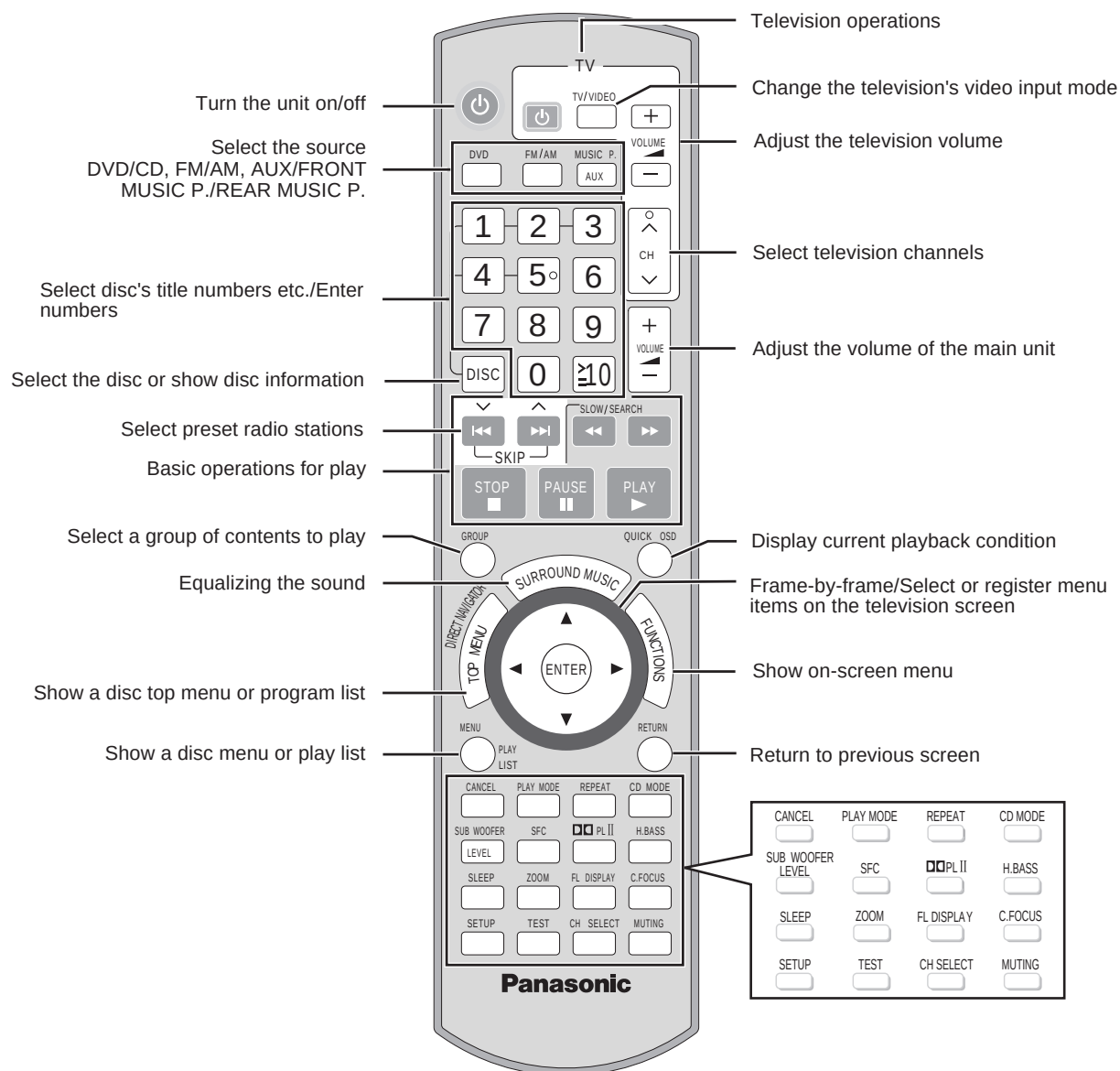
Speaker label



Video Cable

7 Operation Procedures

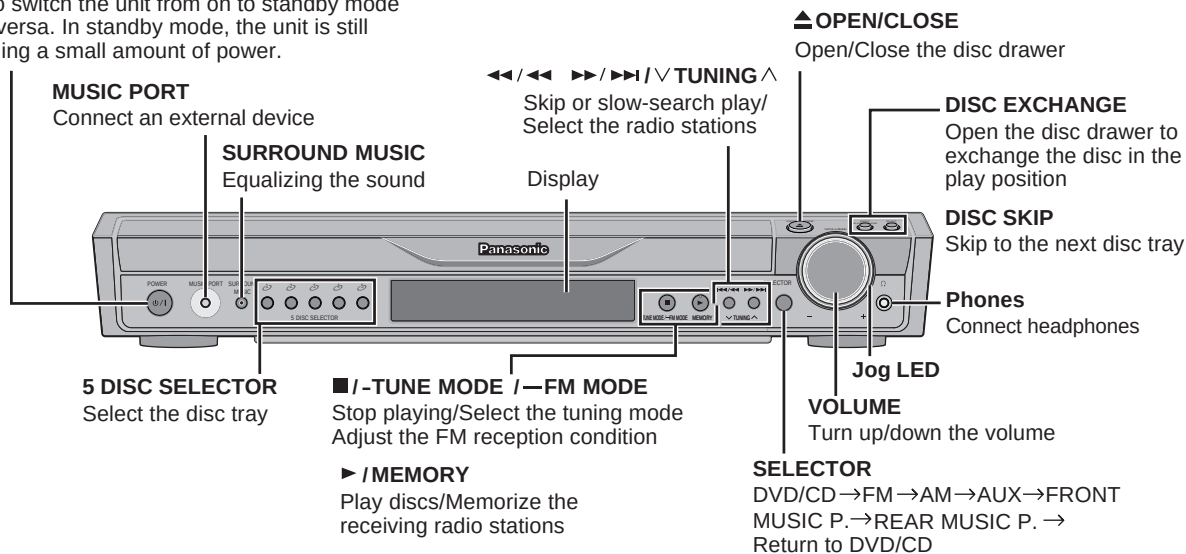
7.1. Remote Control Keys Operation



7.2. Main Unit Keys Operation

Standby/on switch [POWER]

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.



7.3. Disc information

■ Discs that can be played

	DVD-Video DVD-V —
	DVD-Audio DVD-A DVD-V • DVD-V Some DVD-Audio discs contain DVD-Video content.
	Video CD VCD • Including SVCD (Conforming to IEC62107).
	DVD-RAM DVD-VR MP3 JPEG • DVD-VR Recorded with devices using Version 1.1 of the Video Recording Format (a unified video recording standard), such as DVD video recorders, DVD video cameras, personal computers, etc. • JPEG Recorded with Panasonic SD multi cameras or DVD video recorders using the DCF (Design rule for Camera File System) Standard Version 1.0.
	DVD-R (DVD-Video) ^{*1} /DVD-RW (DVD-Video) DVD-V • Discs recorded and finalized ^{*2} on DVD video recorders or DVD video cameras. DVD-R (VR) ^{*1} /DVD-RW (VR) DVD-VR • Discs recorded and finalized ^{*2} on DVD video recorders or DVD video cameras using Version 1.1 or 1.2 (DVD-R only) of the Video Recording Format (a unified video recording standard). DVD-R/DVD-RW MP3 JPEG • Finalize ^{*2} the disc after recording.
—	+R(Video) ^{*1} /+RW(Video) DVD-V • Discs recorded and finalized ^{*2} on DVD video recorders or DVD video cameras.
	CD CD WMA MP3 JPEG VCD • This unit can play CD-R/RW recorded with the above formats. Close the sessions or finalize ^{*2} the disc after recording. • CD This unit is compatible with HDCD, but does not support the Peak Extend function (a function which expands the dynamic range of high-level signals). HDCD-encoded CDs sound better because they are encoded with 20 bits, as compared with 16 bits for all other CDs. • WMA MP3 JPEG This unit also plays HighMAT discs. • WMA This unit does not support Multiple Bit Rate (MBR: an encoding process for audio content that produces an audio file encoded at several different bit rates).

*1 Includes one-sided, double-layered discs.

*2 A process that allows play on compatible equipment.

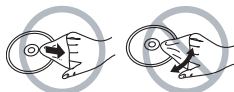
• It may not be possible to play all the abovementioned discs in some cases due to the type of disc or condition of the recording.

■ Discs that cannot be played

DVD-RW version 1.0, DVD-ROM, CD-ROM, CDV, CD-G, SACD, DivX Video Discs and Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

■ To clean discs

Wipe with a damp cloth and then wipe dry.



■ Disc handling precautions

- Do not attach labels or stickers to discs. This may cause disc warping, rendering it unusable.
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzene, thinner, liquids which prevent static electricity, or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
 - Discs with exposed adhesive from removed stickers or labels (rented discs, etc).
 - Discs that are badly warped or cracked.
 - Irregularly shaped discs, such as heart shapes.

Note about using a DualDisc

- The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback may not be possible.
- Do not use DualDisc in this unit as it may not be possible to insert it correctly and it may get scratched or scraped.

■ Clean this unit with a soft, dry cloth.

- Never use alcohol, paint thinner or benzene to clean this unit.
- Before using chemically treated cloth, carefully read the instructions that came with the cloth.

Do not use commercially available lens cleaners as they may cause malfunction. Cleaning of the lens is generally not necessary although this depends on the operating environment.

Before moving the unit, ensure the disc trays are empty.

Failure to do so will risk severely damaging the disc and the unit.

Tips for making WMA/MP3 and JPEG discs (For CD-R, CD-RW)

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- When there are more than 8 groups, the eighth group onwards will be displayed on one vertical line in the menu screen.
- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

Naming folders and files

(Files are treated as content and folders are treated as groups on this unit.)

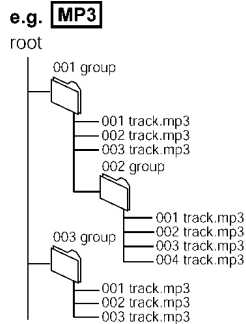
At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times).

Files must have the extension:

".WMA" or ".wma"

".MP3" or ".mp3"

".JPG", ".jpg", ".JPEG" or ".jpeg"



WMA

- You cannot play WMA files that are copy protected.
- This unit does not support Multiple Bit Rate (MBR).

MP3

This unit does not support ID3 tags.

Compatible sampling rates: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz.

JPEG

- To view JPEG files on this unit:
 - Take them on a digital camera that meets the DCF Standard (Design rule for Camera File system) Version 1.0. Some digital cameras have functions that are not supported by the DCF Standard Version 1.0 like automatic picture rotation which may render a picture un-viewable.
 - Do not alter the files in any way or save them under a different name.
- This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF) or play pictures with attached audio.

8 New Features

8.1. Using of Receiver Unit (SH-FX60 / SH-FX80)

- This model can be equipped with the digital transmitter and receiver to enjoy surround sound wirelessly.

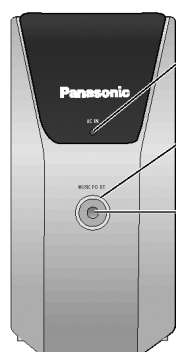
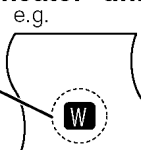
8.1.1. Below is tips on using the digital receiver (SE-FX60)

Making the wireless link

Refer also to the operating instructions for your home theater unit.

- 1 Turn on your home theater unit.**
 - Ensure the wireless system is plugged into the AC outlet.
- 2 Check the wireless link indicator on the home theater unit.**

- "W" should light up in the display on the home theater unit.
- If "W" is flashing, refer to troubleshooting guide of the operating instructions.



Power indicator [AC IN]

This indicator lights when the unit is plugged into the AC outlet.

Lighting Ring

The light goes out when the unit is in standby mode.

MUSIC PORT

Allows you to connect and enjoy music from an external device (e.g. MP3 player). Refer to your home theater unit's operating instructions.

- Select the appropriate input source on your home theater unit (e.g. "REAR MUSIC P.").
- Plug type: 3.5mm (1/8") monaural
- Music is not available without wireless link.

- 3 Start play on the home theater unit.**

Conserving power

The wireless system consumes a small amount of power, even when it is in standby mode (approx. 0.5W: Transmit mode, 1.2W: Receive mode). To save power when the unit is not to be used for a long time, unplug it from the household AC outlet.

8.1.2. Tips on using digital transmitter (SH-FX60T)

Connecting and positioning

Preparation

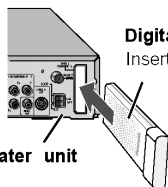
- Turn off all equipment before connection and read the appropriate operating instructions.
- Connect the AC power supply cord after all other connections are complete.

Connecting the digital transceiver

Insert the digital transceiver into the slot of your home theater unit.

e.g.

Do not insert or remove while the home theater unit is on.



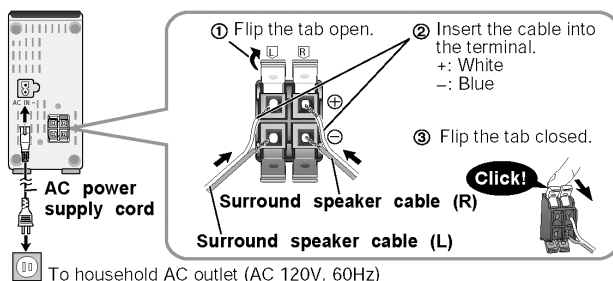
Digital transceiver

Insert fully until you hear a click.

Rear of the home theater unit

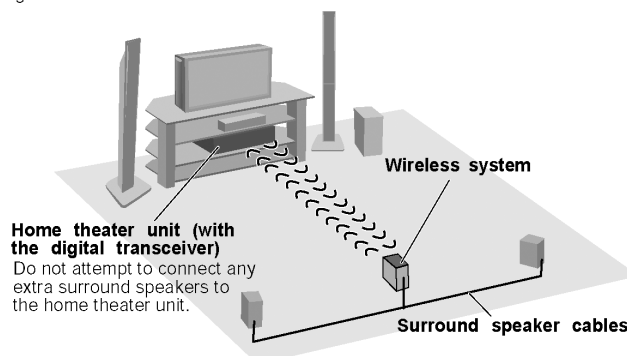
Connecting the surround speaker cables to the wireless system

- 1 If the surround speaker cables have already been connected **Disconnect the surround speaker cables from your home theater unit.**
- 2 **Connect the surround speaker cables to the wireless system.**



● Wireless setup diagram

e.g.



Place the wireless system within approximately 10m (33ft) from the home theater unit.

[Note]

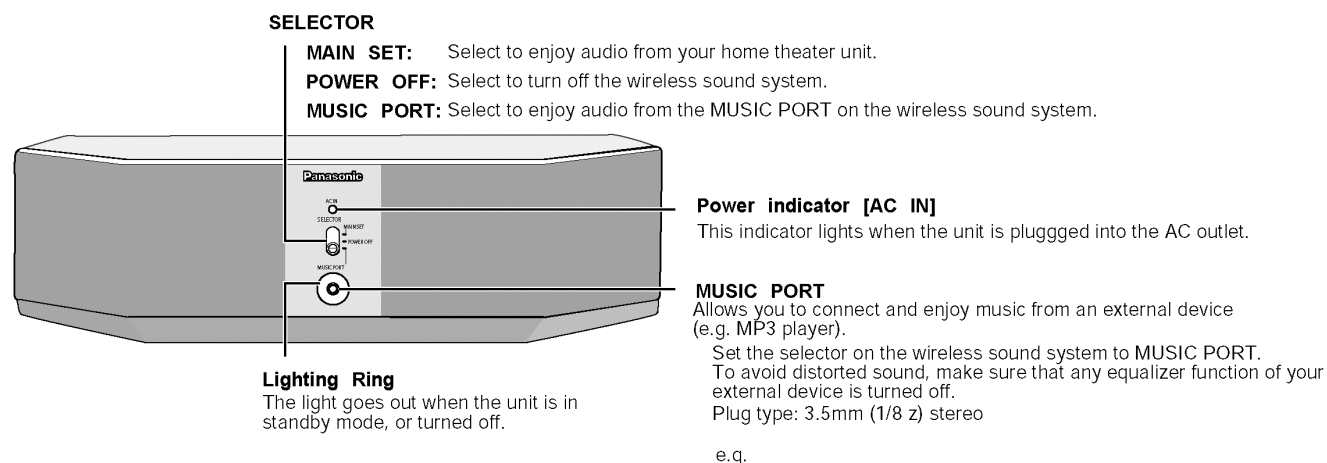
Do not use the wireless system and digital transceiver in a metal cabinet or bookshelf.

8.1.3. Below is tips on using digital receiver (SB-FX80)

Making the wireless link

Refer also to the operating instructions for your home theater unit.

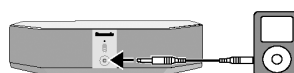
- 1 Turn on your home theater unit.**
Ensure the wireless system is plugged into the AC outlet.
- 2 Select "MAIN SET" or "MUSIC PORT" on the wireless sound system.**



- 3 Check the wireless link indicator on the home theater unit.**

The wireless link indicator (e.g. "[W]" or LED) should light up on the home theater unit.
If the indicator is flashing, refer to troubleshooting guide of the operating instructions.

- 4 Start play on the home theater unit.**



External device (not included)
Reduce the volume before connecting.

Conserving power

The wireless system consumes a small amount of power, even when it is in standby mode (approx. 0.5W). To save power when the unit is not to be used for a long time, unplug it from the household AC outlet.

8.1.4. Tips on using digital transmitter (SH-FX80T)

Connecting and positioning

Preparation

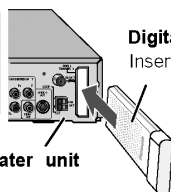
- Turn off all equipment before connection and read the appropriate operating instructions.
- Connect the AC power supply cord after all other connections are complete.

Connecting the digital transmitter

Insert the digital transmitter into the slot of your home theater unit.

e.g.

Do not insert or remove while the home theater unit is on.



Digital transmitter

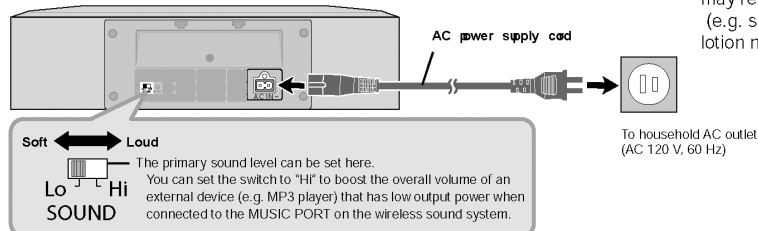
Insert fully until you hear a click.

Rear of the home theater unit

Connecting the AC cord and setting the sound level

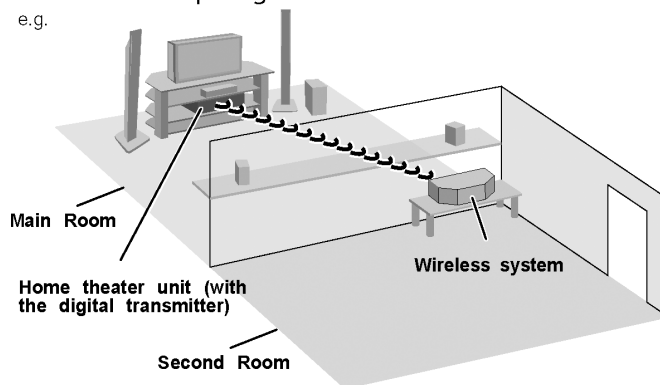
- 1 If the surround speaker cables have already been connected
Disconnect the surround speaker cables from your home theater unit.
- 2 **Connect the AC cord and setting the sound level.**

Connect the AC cord to be wireless sound system.



● Wireless setup diagram

e.g.



Place the wireless sound system within approximately 15m (49ft) from the home theater unit.

[Note]

Do not use the wireless sound system and digital transmitter in a metal cabinet or bookshelf.

When using the wireless sound system in a separate room, thick or dense walls may reduce the 15m(49ft) operating range. If you experience an intermittent link (e.g. sound cutting out), try moving the wireless sound system to a different location nearer to your home theater unit.

8.2. About HDMI

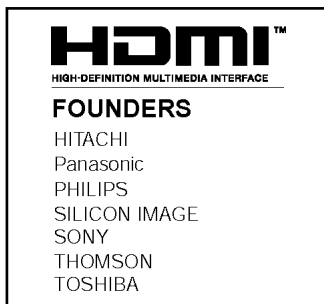
8.2.1. What is HDMI?

AN INTERFACE DESIGNED FOR THE DIGITAL REVOLUTION

From broadcast equipment to TVs, the AV world is going digital. As this digital revolution unfolds, there's a growing need for an interface that digitally transmits signals between connected equipment. The solution: HDMI, or High-Definition Multimedia Interface.

HDMI transmits digital video and audio signals at speeds up to 5 Gps without compressing them. It supports high-definition images up to 1080p and high-quality, multi-channel audio formats such as DVD-Audio. And it provides all this performance with the ease of connecting a single cable.

Also equipped with a copyright protection function, HDMI is a simple, high-performance interface that supports the growing digital age.



HIGH-DEFINITION MULTIMEDIA INTERFACE

1. ADVANCED DIGITAL PICTURES

Digital transmission of video signals helps maximize the quality of HDTV images.

2. ADVANCED DIGITAL SOUND

Digital transmission of multi-channel audio signals, such as DVD-Audio signals, provides an exceptionally pure sound.

3. EASY TO USE

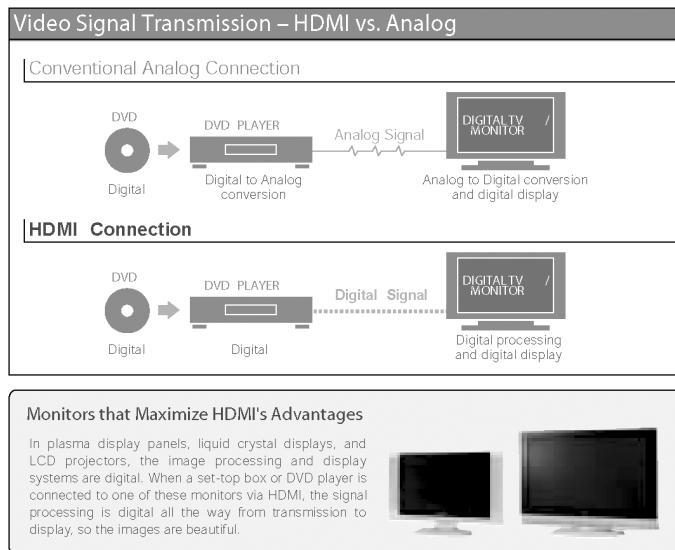
Both video and audio signals are transmitted over a single cable, so connection is easier and there's less clutter.

	Video Signal Type	Audio Signal	Copyright Protection	Signal Compression
HDMI	Digital	●	●	Without compression
IEEE 1394	Digital	●	●	Compression
DVI + HDCP	Digital	—	●	Without compression
DVI	Digital	—	—	Without compression

8.2.2. Advanced Digital Pictures

Compare HDMI connection with conventional analog connection, using the DVD player as an example. With an analog connection, the digital signal from the DVD player is converted to analog and sent to the TV, then converted back to digital and displayed. Inevitably, there is some loss of picture quality due to conversion errors and to noise and signal degradation that occurs as the signal travels through the cable.

With HDMI, on the other hand, the DVD signal is transmitted to the TV in its original digital form. There is no conversion from digital to analog and back, and thus no quality loss from conversion errors. Image quality is thus higher. Plus, because HDMI supports 480p, 1080i, and up to 1080p high-definition images with copy protection, it produces images with quality that is ideal for large-screen viewing.

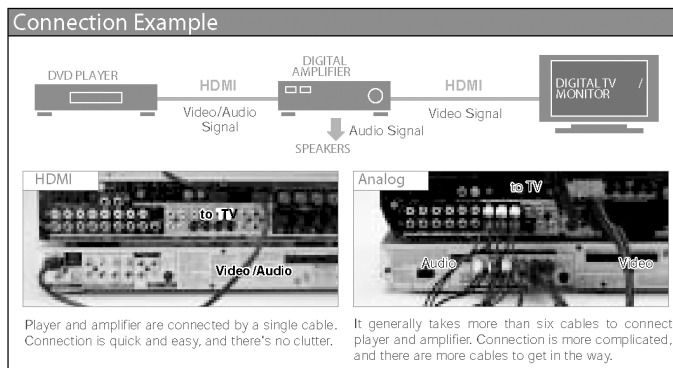


8.2.3. Advanced Digital Sound

The super-high-quality linear PCM sound provided by DVD-Audio is not given its full potential when the digital signal is transmitted through an analog cable.

With a conventional analog connection, the digital signal carrying DVD-Audio's detailed audio data is converted to analog before being sent to the amplifier and output. Sound quality is diminished due to noise and signal degradation.

HDMI, on the other hand, transmits the signal in its original digital form, so the sound is extremely pure. HDMI also supports up to eight channels of multi-channel sound. Plus, it connects the player and amplifier with a single cable, rather than the multiple cables needed in conventional connection.



Linked Control

Here's an example of how linked control will work among HDMI-compatible units in the future. When you insert a disc into the DVD player and press Play, the amplifier and TV automatically turn on too. You get the advantage of one-touch operating ease as well as superior picture and sound quality.



8.2.4. Easy to Use

HDMI transmits both video and audio signals over a single cable, so connection is quick and easy and the area around the TV remains uncluttered. Also, when each of the connected units is HDMI-compatible, control signals can be exchanged among them. This means that, in the future, it will be possible to operate several units from a single remote control, or to operate several units via linked control.



8.2.5. HDMI Compatible Products

Monitors

VIERA

High-Definition Plasma TV **High-Definition LCD TV**

TH-50PX25U/P, TH-42PX25U/P
TH-37PX25U/P



TH-50PX25U/P



TC-32LX20

LCD Projector

TH-AE700



DVD Players

DVD-Audio/Video Player

DVD-S97



Receivers

Home Theater Receiver

SA-XR70



9 Self-Diagnosis and special mode setting

9.1. Service Mode Summary Table

The service modes can be activated by pressing various button combination on the player and remote control unit.

Below is the summary of major checking:

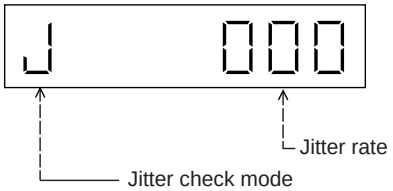
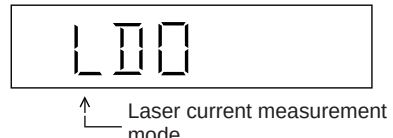
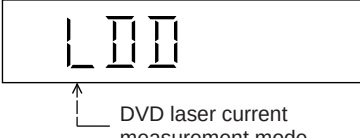
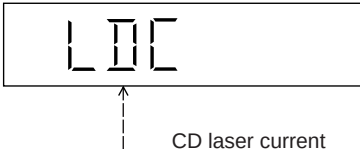
Player buttons	Remote control unit buttons	Application	Note
STOP	0	Error code display	(Refer to the section, "9.3 DVD Self Diagnostic Function-Error Code").
	5	Jitter checking	(Refer to the section "13.4 Optical adjustment").
	6	Region display and mode	(Refer to the section "9.2 Service Mode Table 1 for more information").
	7	Micro-processor firmware version check	
	FUNCTIONS	DVD laser drive current check	(Refer to the item "9.2.1. Optical Pick-up Self-Diagnosis").
	3	CD laser drive current check	
	PAUSE	Writing of laser drive current value after replacement of optical pickup (Do use this function only when optical pickup is replaced.)	
	≥ 10	Initialization of the player (factory setting is restored.) Used after replacement of micro-computer, FLASH ROM IC, EEPROM and HDMI module.	
	8	DVD HDMI Module firmware version check	
	ENTER	DVD Module Reset.	

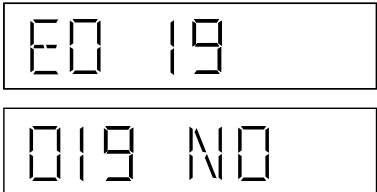
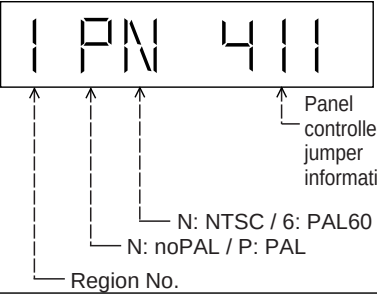
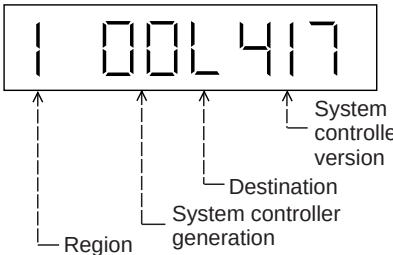
9.2. Service Mode Table 1

By pressing various button combinations on the player and remote control unit can activate the various service modes for checking.

Special Note:

Due to the limitations of the no. characters that can be shown on FL Display, the "FL Display" button on the remote control unit is used to show the following page. (Display 1 / Display 2).

Item		FL Display	Key Operation
Mode Name	Description		Front Key
Jitter check	Jitter check Jitter rate is measured and displayed. Measurement is repeatedly done in the cycle of one second. Read error counter starts from zero upon mode setting. When target block data failed to be read out, the counter advances by one increment. When the failure is caused by minor error, it may be corrected when retried to enable successful reading. In this case, the counter advances by one. When the error persists even after retry, the counter may jump by two or more.	 Jitter rate is shown in decimal notation to one place of decimal. Focus drive value is shown in hexadecimal notation.	In STOP (no disc) mode, press STOP button on the player, and "5" button on the remote control unit. Press STOP or OPEN button to exit. Press "FL Display" button on remote control unit for next page (FL Display).
Error code check	Error code check The latest error code stored in the EEPROM IC is displayed.	 Error code (play_err) is expressed in the following convention. Error code = 0 x DAXX is expressed: DVDnn UXX Error code = 0 x DBXX is expressed: → DVDnn HXX Error code = 0 x DXXX is expressed: → DVDnn FXXX Error code = 0 x 0000 is expressed: → DVDnn F--- * "xx" denotes the error code →	In STOP (no disc) mode, press STOP button on the player, and "0" button on the remote control unit. * With pointing of cursor up and down on display. Cancelled automatically 5 seconds later. To exit, press [POWER] button on main unit or remote control.
Initial setting of laser drive current	Initial setting of laser drive current. Initial current value for each of DVD laser and CD laser is separately saved in the EEPROM IC.	 The value denotes the current in decimal notation. The above example shows the initial current is 34mA and 28mA for DVD laser and CD laser respectively when the laser is switched on.	In STOP (no disc) mode, press STOP button on the player, and PAUSE button on the remote control unit. Cancelled automatically 5 seconds later. Press "FL Display" button on remote control unit for next page (FL Display) on values of laser drive current.
DVD laser drive current measurement	DVD laser drive current measurement ·DVD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, DVD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when POWER button on the player is switched off.)	 The value denotes the current in decimal notation. The above example shows the initial current is 34mA and the measured value is 32mA.	In STOP (no disc) mode, press STOP button on the player, and FUNCTIONS button on the remote control unit. Cancelled automatically 5 seconds later. Press "FL Display" button on remote control unit for next page (FL Display) on values of dvd drive current.
ADSC internal RAM data check	ADSC internal RAM data check ·ADSC internal RAM data is read out and displayed.	 The value is shown in hexadecimal notation. The above example shows the data in ADSC address OFAh is 6901h.	In STOP (no disc) mode, press STOP button on the player, and "1" button on the remote control unit. Press STOP or PLAY button.
CD laser drive current measurement	CD laser drive current measurement CD laser drive current is measured and the result is displayed together with the initial value stored in the EEPROM IC. After the measurement, CD laser emission is kept on. It is turned off when POWER key is switched off. (It is also turned off when POWER button on the player is switched off.)	 The value denotes the current in decimal notation. The above example shows the initial current is 28mA and the measured value is 26mA.	In STOP (no disc) mode, press STOP button on the player, and "3" button on the remote control unit. Cancelled automatically 5 seconds later. Press "FL Display" button on remote control unit for next page (FL Display).

Mode Name	Item	FL Display	Key Operation
	Description		Front Key
Micro-processor firmware version display & EEPROM checksum display.	Micro-processor firmware version display & EEPROM checksum display.		In STOP (no disc) mode, press STOP button on the player, and "7" button on the remote control unit. Cancelled automatically 5 seconds later. Press "FL Display" button on remote control unit for next page. (FL Display)
Initialization	Initialization User settings are cancelled and player is initialized to factory setting.		In STOP (no disc) mode, press STOP button on the player, and ≥ 10 button on the remote control unit.
Region display	Region display & mode		In STOP (no disc) mode, press STOP button on the player, and "6" button on the remote control unit. Cancelled automatically 5 seconds later.
DVD (HDMI) module firmware version display	DVD (HDMI) module firmware version display is on the FL Display.		In STOP (no disc) mode, press STOP button on the player, and "8" button on the remote control unit. Cancelled automatically 5 seconds later.
Communication error display	Displays frequency of communication errors between system control IC and mechanism control IC during DVD module.		In STOP (no disc) mode, press STOP button on the player, and "MENU" button on the remote control unit. Cancelled automatically 5 seconds later.
DVD Module Reset	To reset DVD Module.		In STOP (no disc) mode, press STOP button on the player, and "ENTER" button on the remote control unit. Cancelled automatically 5 seconds later.

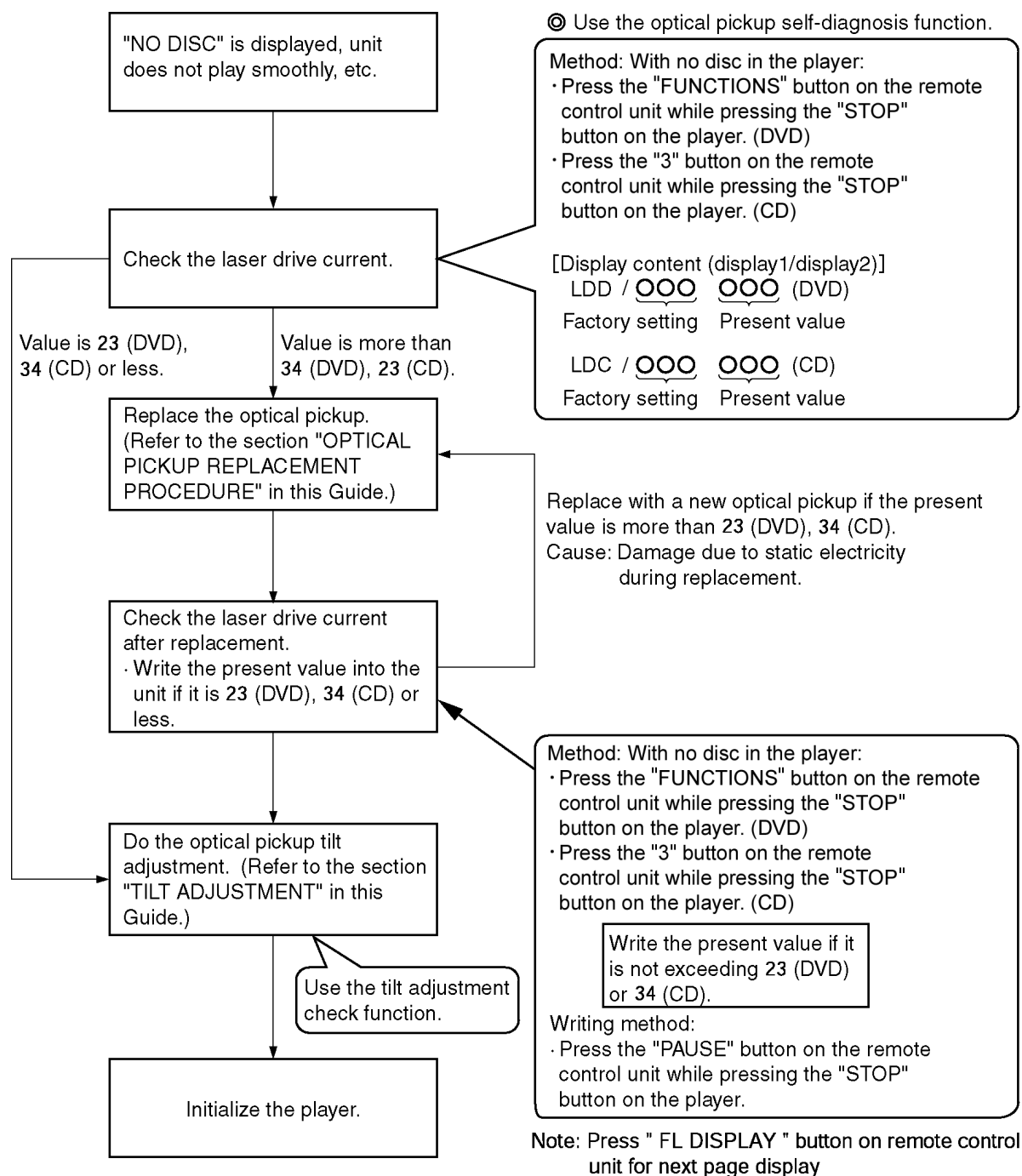
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Timer 1 check	Timer 1 check Laser operation timer Operation time is measured separately for DVD laser and CD laser. Press "FL Display" button for next page of FL Display	 Shown to the left is DVD laser time, and to the right CD laser time. Time is shown in 4 digits of decimal notation in a unit of 10 hours. "0000" will follow "9999".	In STOP (no disc) mode, press STOP button on the player, and "▲" button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 1 reset	Timer 1 reset Laser operation timer Operation time of both DVD laser and CD laser is reset all at once.	T1_0000/0000 (display1/display2)	While displaying Timer 1 data, press STOP button on the player, and "▼" button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 2 check	Timer 2 check Spindle motor operation timer Press "FL Display" button for next page of FL Display	 Time is shown in 5 digits of decimal notation in a unit of 10 hours. "00000" will follow "99999".	In STOP (no disc) mode, press STOP button on the player, and "▶" button on the remote control unit. Cancelled automatically 5 seconds later.
Timer 2 reset	Timer 2 reset Spindle motor operation timer	T2_00000	While displaying Timer 2 data, press STOP button on the player, and "◀" button on the remote control unit. Cancelled automatically 5 seconds later.

9.2.1. Optical Pick-up Self-Diagnosis

The optical pickup self-diagnosis function and tilt adjustment check function have been included in this unit. When repairing, use the following procedure for effective self-diagnosis and tilt adjustment. Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than 10 (Difference between actual and preset value).

Note:

Press the power button to turn on the power, and check the value within three minutes before the unit warms up. (Otherwise, the result will be incorrect.)



9.3. DVD Self Diagnostic Function-Error Code

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
U11	Focus servo error	Focus coil NG (OPU unit abnormal)	DVD U11	Press [n STOP] on main unit for next error.
H01	Tray loading error / abnormality	The tray is not able to open	DVD H01	Press [n STOP] on main unit for next error
H02	Spindle servo error, DSC disc motor error	(Spindle servo, DSC (IC8251) Spindle motor, CLV servo error)	DVD H02	Press [n STOP] on main unit for next error
H03	Traverse motor error	(Traverse motor, IC8251)	DVD H03	Press [n STOP] on main unit for next error
H04	Tracking servo error	Tracking coil NG (OPU unit abnormal)	DVD H04	Press [n STOP] on main unit for next error
H05	Seek timeout error	Timeout of unit when seeking time is reached	DVD H05	Press [n STOP] on main unit for next error
H15	Disc tray open detection switch (S9001) failure	The disc tray cannot be opened: it closes spontaneously	DVD H15	Press [n STOP] on main unit for next error
H16	Disc tray close detection switch (S9001) failure	The disc tray cannot be closed: it opens spontaneously	DVD H16	Press [n STOP] on main unit for next error
F61	Power digital amp IC op & DC output voltage abnormal.	Upon power-on PCONT=High, DCDET=Low	DVD F61	Press [n STOP] on main unit for next error
F76	Power digital amp IC op & DC output voltage abnormal.	Speaker Jack shorted or amp circuit	DVD F76	Press [n STOP] on main unit for next error
F500	DSC error	DSC (IC8251) stops in the occurrence of servo error (startup, focus error, etc.)	DVD F500	Press [n STOP] on main unit for next error
F501	DSC not Ready error	DSC-system computer communication error (Communication failure caused by idling of DSC)	DVD F501	Press [n STOP] on main unit for next error
F502	DSC Time out error	Similar as F500	DVD F502	Press [n STOP] on main unit for next error
F503	DSC communication Failure	Communication error (result error occurred although communication command was sent)	DVD F503	Press [n STOP] on main unit for next error
F504	Abnormal adjusting DSC data slice offset		DVD F504	Press [n STOP] on main unit for next error
F505	DSC Attention error	Similar as F500	DVD F505	Press [n STOP] on main unit for next error
F506	Invalid media	Disc is flipped over, TOC unreadable, incompatible disc media	DVD F506	Press [n STOP] on main unit for next error

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F600	Access failure to management information caused by demodulation error	Operation stopped because navigation data is not accessible caused by the demodulation defect	DVD F600	Press [n STOP] on main unit for next error
F601	Indeterminate sector ID requested	Operation stopped caused by the request to access abnormal ID data	DVD F601	Press [n STOP] on main unit for next error
F602	Access failure to LEAD-IN caused by demodulation error	LEAD IN data unreadable	DVD F602	Press [n STOP] on main unit for next error
F603	Access failure to KEYDET caused by demodulation error	Access failure to CSS data of disc	DVD F603	Press [n STOP] on main unit for next error
F610	ODC abnormality	No permission for command execution	DVD F610	Press [n STOP] on main unit for next error
F611	No CRC OK for a specific time (CD)	Access failure to seek address in CD series	DVD F611	Press [n STOP] on main unit for next error
F612	No CRC OK for a specific time (DVD)	Access failure to ID data in DVD series	DVD F612	Press [n STOP] on main unit for next error
F620	Laser safeguard: high temperature condition	High temperature of the laser guide unit (OPU unit)	DVD F620	Press [n STOP] on main unit for next error
F621	Laser safeguard: circuit failure condition	Circuitry failure of the laser guide unit (OPU unit)	DVD F621	Press [n STOP] on main unit for next error
F103	Illegal highlight Position	Big possibility of disc specification violation during highlight display	DVD F103	Press [n STOP] on main unit for next error
F4FF	Force initialize failure (time out)	Timeout when force initialization fails	DVD F4FF	Press [n STOP] on main unit for next error
F700	MBX overflow	When replying message to disc manager	DVD F700	Press [n STOP] on main unit for next error
F701	Message command does not end	Next message is sent before replying to disc manager	DVD F701	Press [n STOP] on main unit for next error
F702	Message command changes	Message is changed before it is sent as a reply to disc manager	DVD F702	Press [n STOP] on main unit for next error
F880	Task number is not appropriate	Message coming from a non-existing task	DVD F880	Press [n STOP] on main unit for next error
F890	Sending message when message is being sent to AV task	Sending message to AV task	DVD F890	Press [n STOP] on main unit for next error
F891	Message couldn't be sent to AV task	Begin sending message to AV task	DVD F891	Press [n STOP] on main unit for next error

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F893	FLASH ROM IC problem	FLASH ROM IC installed is not operating properly (Necessary replacement of FLASH ROM IC) or firmware problem	DVD F893	Press [n STOP] on main unit for next error
F894	EEPROM abnormality	EEPROM IC installed is not operating in normal condition (EEPROM contains necessary data)	DVD F894	Press [n STOP] on main unit for next error
F895	Region setting abnormality	Firm version agreement check for factory preset setting failure prevention. Check region setting & re-initialize	DVD F895	Press [n STOP] on main unit for next error
F896	No existence model	Firm version agreement check for factory preset setting failure prevention	DVD F896	Press [n STOP] on main unit for next error
F897	Initialize is not completed	Initialize completion check for factory preset setting failure prevention	DVD F897	Press [n STOP] on main unit for next error
F898	Disagreement of hardware and software	Unsuitable combination of AV DECODER, SDRAM and FLASH ROM (firmware)	DVD F898	Press [n STOP] on main unit for next error
F8A0	Message command is not appropriate	Begin sending message to AV task	DVD F8A0	Press [n STOP] on main unit for next error

Note:

An error code will be canceled if a power supply is turned OFF.

*1: CPPM is the copy guard function beforehand written in the disk for protection of copyrights.

*2: CEC is the consumer electronic control used for high-level user control of HDMI-connected devices.

*3: HDCP is the specification developed to control digital audio & video contents transmission for DVI or HDMI connections.

9.4. Sales Demonstration Lock Function

This function prevents discs from being lost when the unit is used for sales demonstrations by disabling the disc eject function. "LOCKED" is displayed on the unit, and ordinary operation is disabled.

9.4.1. Setting

· Prohibiting removal of disc

1. Select the DVD/CD function.
2. Press and hold down the  button and the power button on the player for at least three seconds. (The message, "___LOCKED_" appears when the function is activated.)

Note:

OPEN/CLOSE , DISC CHECK and DISC CHANGE buttons are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

· Prohibiting operation of selector and disk

1. Select the DVD/CD function.
2. Press and hold down the  button and the power button on the player for at least three seconds. (The message, "___LOCKED_" appears when the function is activated.)

Note:

The following buttons are invalid and the player displays "___LOCKED_" while the lock function mode is entered.

Player	 ,  ,  , SELECTOR,  ,  , VOLUME KNOB, DISC CHECK, DISC CHANGE, DISC1-DISC5
Remote controller unit	SLEEP, REPEAT, 0~9,  ,  , RETURN, TOP MENU,  ,  ,  ,  ,  ,  , POSITION MEMORY, TUNER/BAND, D.MIX, CH SELECT/ TEST, SET UP/ MUTEING, DISPLAY, GROUP, TV, VCR/ AUX, QUICK REPLAY, SUBTITLE, FL DISPLAY, CH & VOLUME

9.4.2. Cancellation

The lock can be cancelled by the same procedure as used in setting. ("UNLOCK" is displayed on cancellation. Disconnecting the

power cable from power outlet does not cancel the lock.)

9.5. Service Precautions

9.5.1. Recovery after the DVD player is repaired

- When the IC or HDMI module P.C.B. is replaced, carry out the recovery processing to optimize the drive.
Playback the recovery disk to process the recovery automatically.
- Recovery disc (Product number: RFKZD03R005)
- Performing recovery process
 1. Load the recovery disc RFKZD03R005 on to the player and run it.
 2. Recovery is performed automatically. When it is finished, a message appears on the screen.
 3. Remove the recovery disc.
 4. Turn off the power.
 5. Initialize the player.

9.5.2. Firmware version-up of the DVD player

- The firmware of the DVD player may be renewed to improve the quality including operability and playability to the substandard discs.processing to optimize the drive.
The recovery disc has also firmware version-up.
- After version-up, recovery processing is executed automatically.
- Part number of the recovery disc for version-up will be noticed when it is supplied.
- Updating firmware
 1. Load the recovery disc on to the player and run it.
 2. Firmware version of the player is automatically checked. Appropriate message appears whenever necessary.
 3. Using remote controller's cursor key, select whether version updating is to be done or not. (Selection of Yes/No)
 4. a. If Yes is selected, version updating is performed.
 - b. If No is selected, only recovery is performed.
 5. a. When updating is finished, remove the disc according to the message appearing on the screen.
 - b. Remove the disc according to the message appearing on the screen.
 6. Turn off the power.

Note:

If the AC power supply is shut out during version-up due to a power failure, the version-up is improperly carried out.
In such a case, replace the FLASH ROM IC and carry out the version-up again.

9.5.3. DVD Module Reset

- When after replacing Flash Rom IC or the DVD Module P.C.B., FL displays error code "DVD F897". This means the unit is not initialized properly and the following process needs to be carry out.
- Procedures:
 1. Press ≥ 10 on remote control while pressing "STOP" button on main unit.
 2. FL display show " Initialize"
 3. While still pressing "STOP" button on main unit, press "ENTER" on remote control.
 4. FL will display "DVD RESET" before FL display will change to TOC reading again.
 5. Power off unit. Unplug the AC cord.
 6. Power on the unit. It should be no problem. If problem persist check on the DVD module P.C.B. or FLASH ROM IC.

10 Assembling and Disassembling

“ATTENTION SERVICER”

Be careful when disassembling and servicing.

Some chassis components may have sharp edges.

Special Note:

1. This section describes the disassembly procedures for all the major printed circuit boards and main components.
2. Before the disassembly process was carried out, do take special note that all safety precautions are to be carried out.
(Ensure that no AC power supply is connected during disassembling.)
3. For assembly after operation checks or replacement, reverse the respective procedures.

Special reassembly procedures are described only when required.

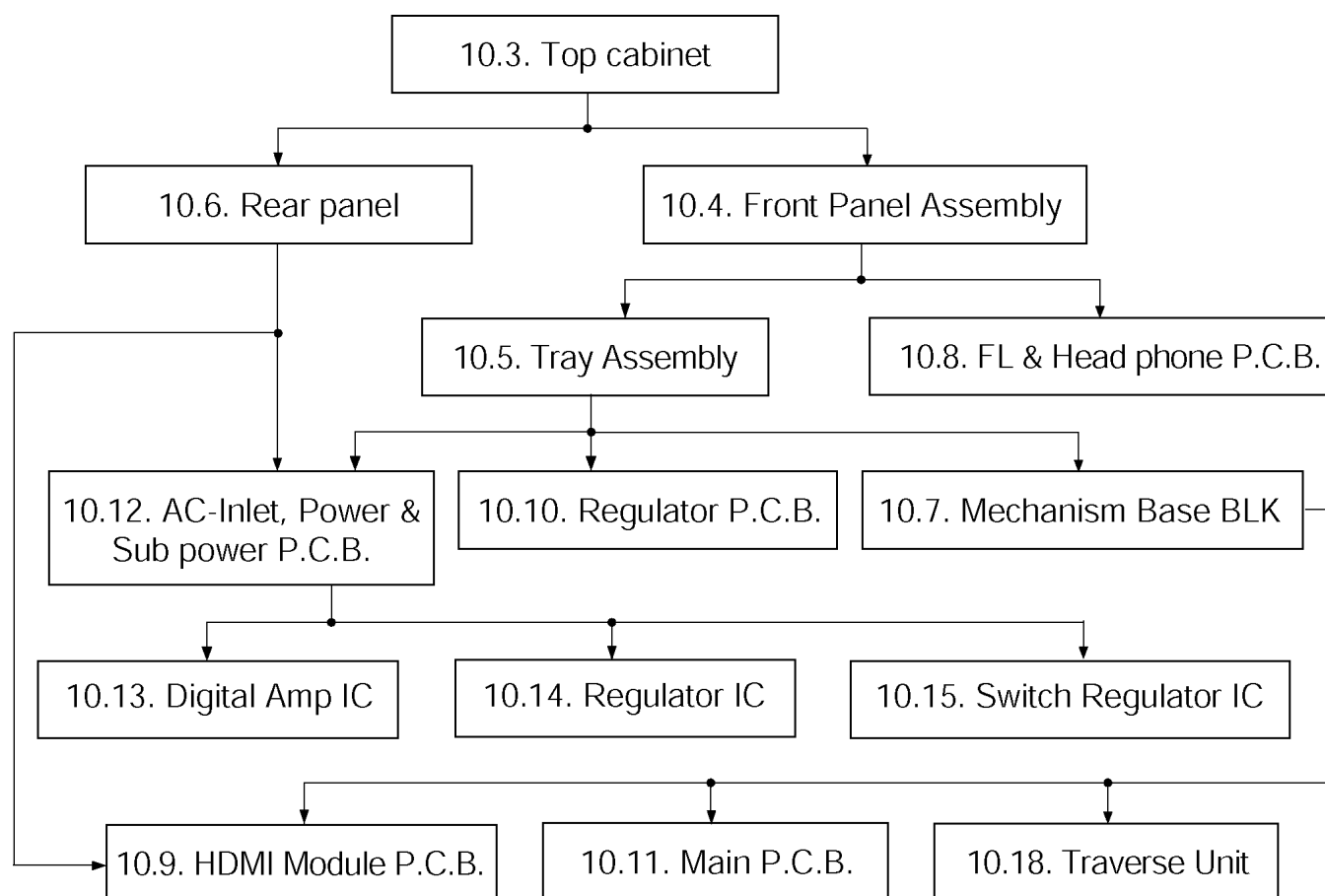
4. The Switch Regulator IC may have high temperature after prolonged use.
Use caution when removing the top cabinet and avoid touching heat sinks located in the unit.
5. Select items from the following index when checks or replacement are required.

- Disassembling the Top Cabinet
- Disassembling the Front Panel
- Disassembling the Tray Assembly
- Disassembling the Rear Panel
- Disassembling the Mechanism Base Block
- Disassembling the FL & Head phone P.C.B.
- Disassembling the HDMI Module P.C.B.
- Disassembling the Regulator P.C.B.
- Disassembling the Main P.C.B.
- Disassembling the AC Inlet, Power & Sub power P.C.B.
- Disassembly of Digital Amp IC
- Disassembly of Regulator IC
- Disassembly of Switch Regulator IC
- Disassembly of the Tray Base Guide (L) and Tray Base Guide (R)
- Disassembly of the Rotary Tray
- Disassembly of the Open Lock Gear
- Disassembly of the Close Lock Gear
- Disassembly of the Tray Motor P.C.B. and Sensor P.C.B.
- Disassembly of the Traverse Unit
- Disassembly of the Pulley Gear
- Disassembly of the Loading Motor P.C.B.
- Disassembly of the Drive Gear (A) & (B)
- Disassembly of Fixed Plate, Magnet and Clamper
- Disassembly of Cam Gear & Support Piece
- Disassembly of the Slide Plate (L) & (R) and Change Lever
- Assembly of Tray Assembly

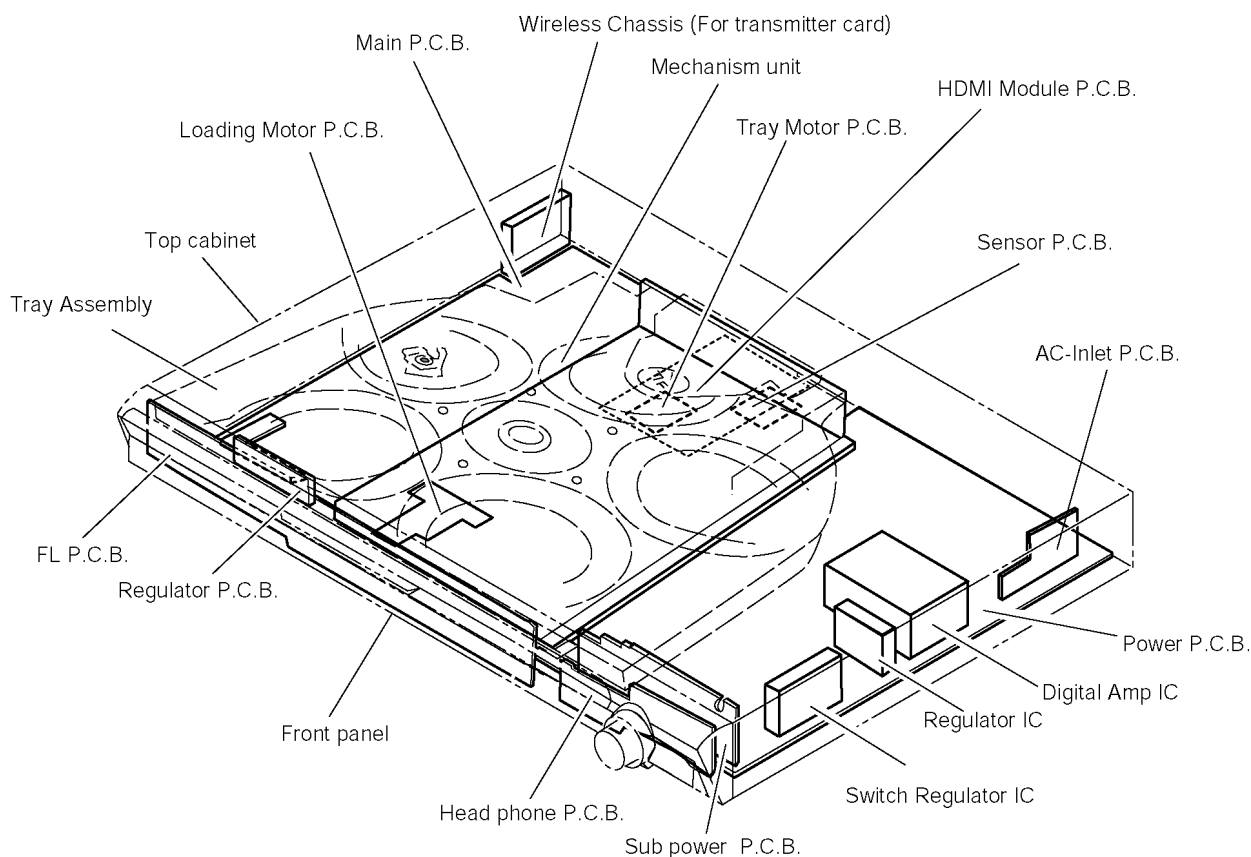
CAUTION NOTE:

Please use original screw and at correct locations.

10.1. Disassembly Flow Chart



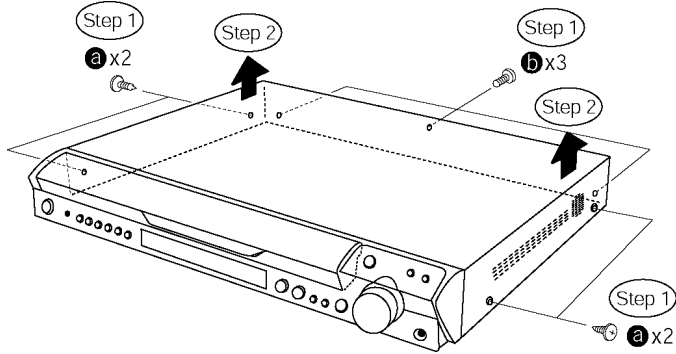
10.2. Main Components and P.C.B. Locations



10.3. Disassembling the Top Cabinet

Step 1 Remove 7 screws.

Step 2 Remove the top cabinet in the direction of arrow.



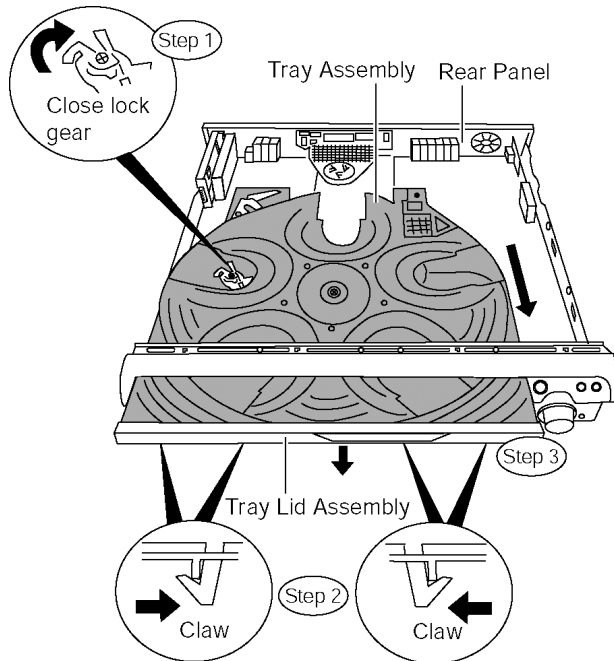
10.4. Disassembling the Front Panel Assembly

- Follow (Step 1) to (Step 2) of Item 10.3.
- Disassembly of tray lid assembly. [(Step 1) to (Step 3) of the following]

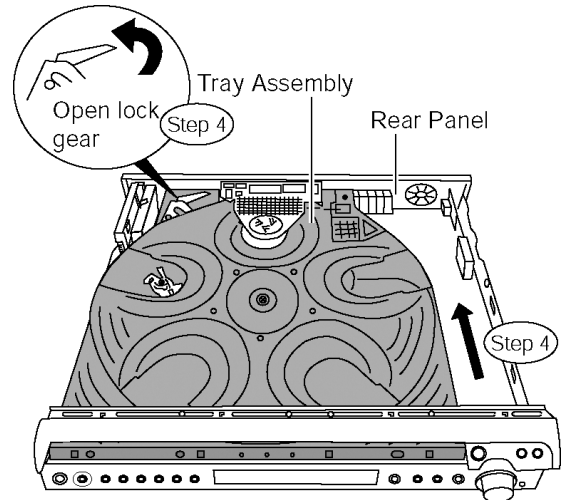
Step 1 Keep the close lock gear pressed in clockwise direction, then move the tray assembly out halfway in the direction of the arrow.

Step 2 Release the claws at the bottom of the tray lid assembly.

Step 3 Remove the tray lid assembly in the direction of arrow.



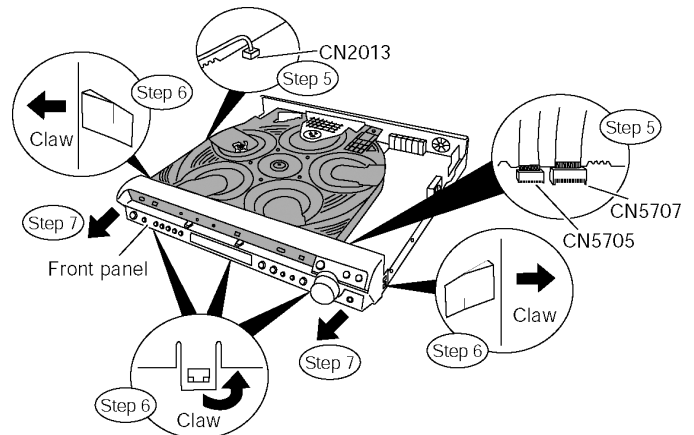
Step 4 Keep the open lock gear pressed in anti clockwise direction and push back the tray assembly.



Step 5 Detach the FFC cables from connectors (CN5705, CN5707 & CN2013).

Step 6 Release the claws of the front panel in the directions.

Step 7 Detach the front panel assembly in the direction of arrow.



10.5. Disassembling the Tray Assembly

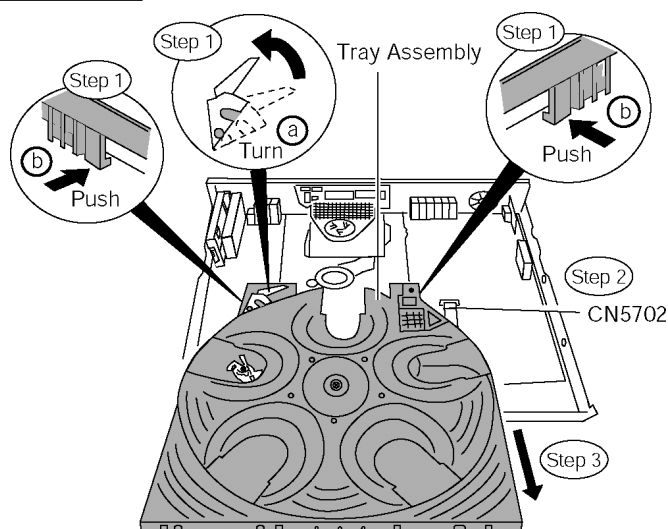
- Follow (Step 1) to (Step 7) of Item 10.4.

Step 1 Press and hold the open lock gear, then push and release the claws in the direction of arrow.

Step 2 Detach the FFC cable from connector (CN5702).

Step 3 Remove the tray assembly in the direction of arrow.

Caution: Avoid using excessive strong force when removing the tray assembly.



10.6. Disassembling the Rear Panel

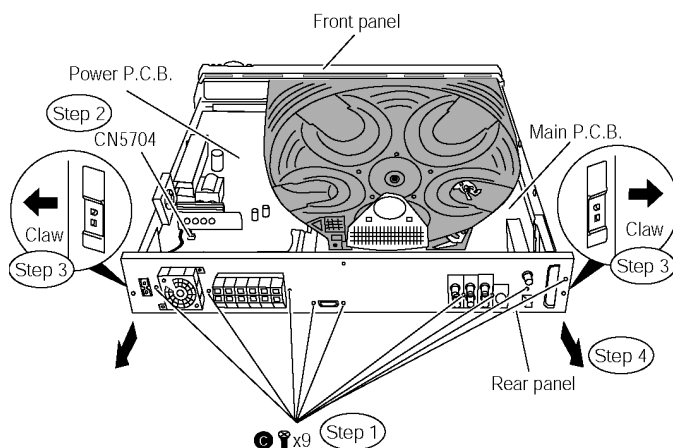
• Follow (Step 1) to (Step 2) of Item 10.3.

Step 1 Remove 9 screws.

Step 2 Detach the FFC cable from connector (CN5704).

Step 3 Release the claws of the rear panel in the directions.

Step 4 Remove the rear panel in the direction of arrow.



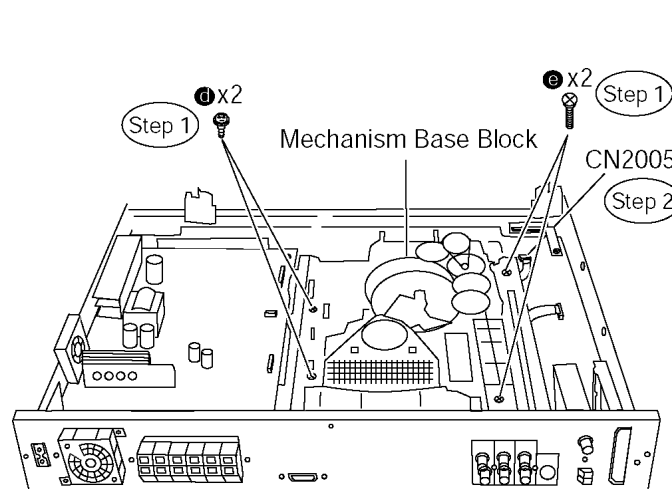
10.7. Disassembling the Mechanism Base Assembly

• Follow (Step 1) to (Step 3) of Item 10.5.

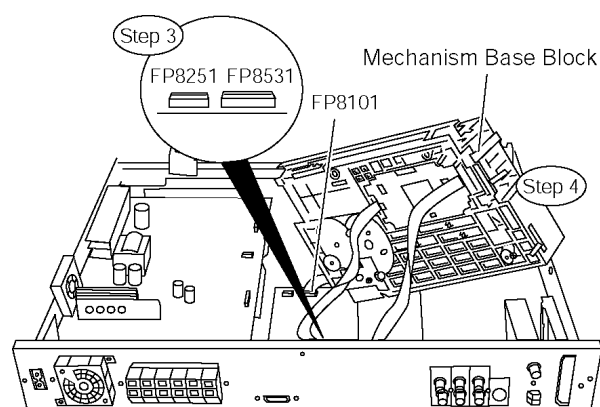
Step 1 Remove 2 screws on each side of the mechanism base block.

Caution: Take note of the screw type used. During assembling, use the correct screw type and at the correct location.

Step 2 Detach FFC cable at connector (CN2005).



Step 3 Detach FFC cables at connectors (FP8251 & FP8531).



Step 4 Remove the mechanism base block.

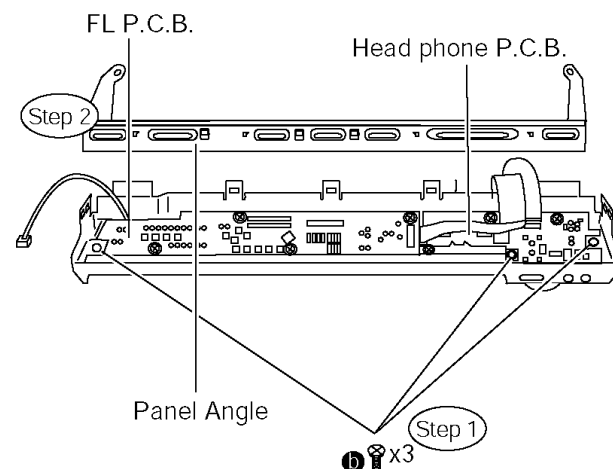
10.8. Disassembling the FL & Head phone P.C.B.

• Follow (Step 1) to (Step 7) of Item 10.4.

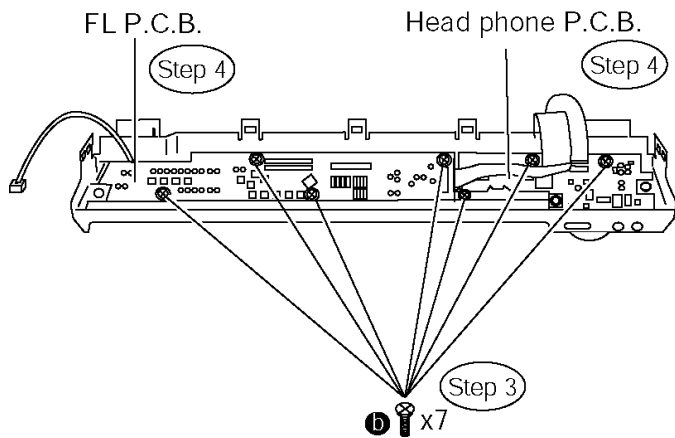
• Disassembly of the panel angle. [(Step 1) to (Step 2) of the following]

Step 1 Remove 3 screws.

Step 2 Remove the panel angle.



Step 3 Remove 7 screws.



Step 4 Remove the FL & Head phone P.C.B.

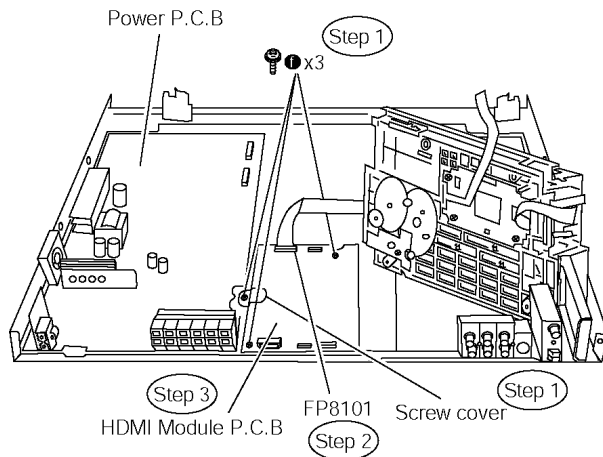
10.9. Disassembling the HDMI Module P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.5
- Follow (Step 1) to (Step 4) of Item 10.6
- Follow (Step 1) to (Step 4) of Item 10.7

Step 1 Remove 3 screws and screw cover.

Step 2 Detach the FFC cable from connector (FP8101).

Step 3 Remove HDMI module P.C.B.



10.10. Disassembling the Regulator P.C.B.

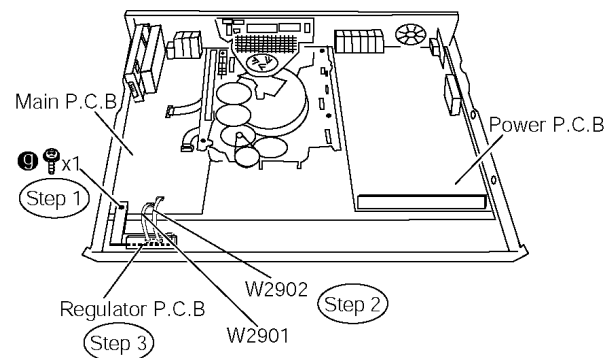
- Follow (Step 1) to (Step 3) of Item 10.5

Step 1 Remove 1 screw.

Step 2 Detach the 2 flat cables from connectors (W2901 & W2902) on Main P.C.B.

Step 3 Remove the Regulator P.C.B.

Caution: During disassembling, please ensure that the flat cables are disconnected from exact connectors indicated.



10.11. Disassembling the Main P.C.B.

- Follow (Step 1) to (Step 4) of Item 10.6.

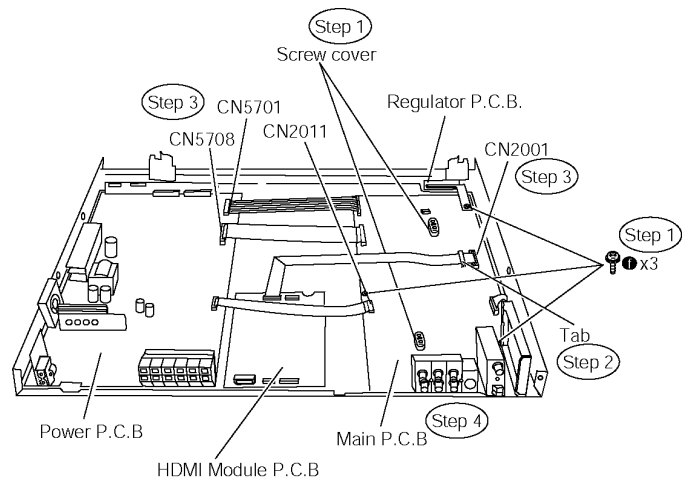
- Follow (Step 1) to (Step 4) of Item 10.7.

Step 1 Remove 3 screws and 2 screw covers.

Step 2 Remove the tab.

Step 3 Detach the FFC cables from connectors (CN2011, CN5701, CN5708, CN2001).

Step 4 Remove the Main P.C.B.



10.12. Disassembling the AC-Inlet, Power & Sub Power P.C.B

- Follow (Step 1) to (Step 4) of Item 10.6.

- Follow (Step 1) to (Step 4) of Item 10.7.

Step 1 Remove 2 screws. (side fan unit)

Step 2 Remove shield plate.

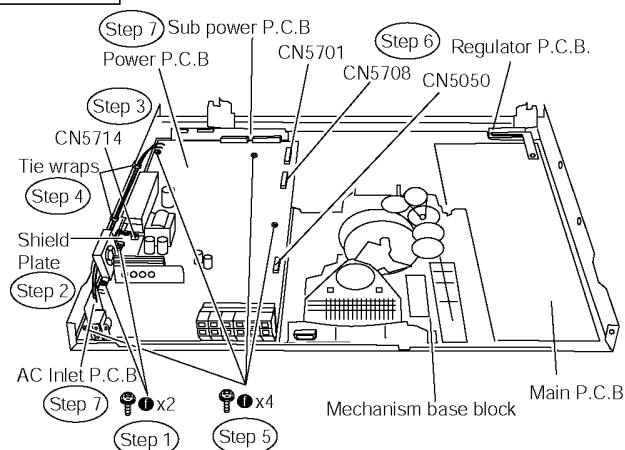
Step 3 Detach fan unit. (CN5714)

Step 4 Remove the 2 tie wraps (used for black/red wires between AC Inlet P.C.B. and Power P.C.B.) to the side of bottom chassis.

Step 5 Remove 4 screws.

Step 6 Detach the FFC cables from connectors (CN5701, CN5708, CN5050).

Step 7 Remove the AC Inlet, Power & Sub Power P.C.B.



Caution: Remember to use tie wraps to tie the black/red wires to the side of bottom chassis after repair or troubleshooting.

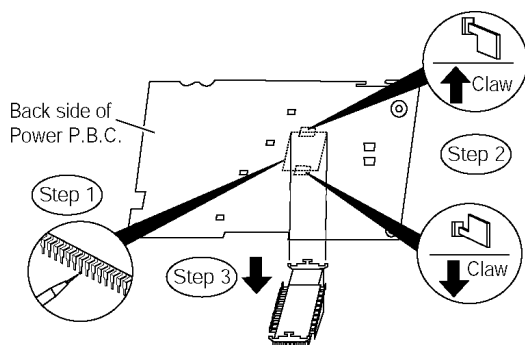
10.13. Disassembly of Digital Amp IC

• Follow (Step 1) to (Step 7) of Item 10.12.

Step 1 Desolder all IC5001 pins.

Step 2 Release the claws.

Step 3 Remove the D. Amp IC (IC5001).



Note: Refer to the diagrams of Power P.C.B. (Section 19.3) for location of the parts.

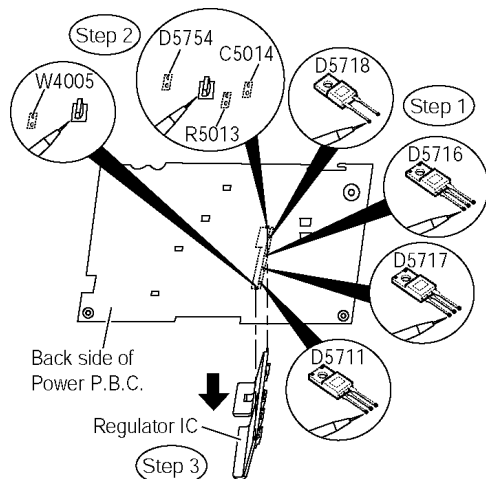
10.14. Disassembly of Regulator IC

• Follow (Step 1) to (Step 7) of Item 10.12.

Step 1 Desolder all pins of D5711, D5716, D5717, D5718.

Step 2 Desolder 2 pins of Regulator IC.

Step 3 Remove the Regulator IC.



Note: Refer to the diagrams of Power P.C.B. (Section 19.3) for location of the parts.

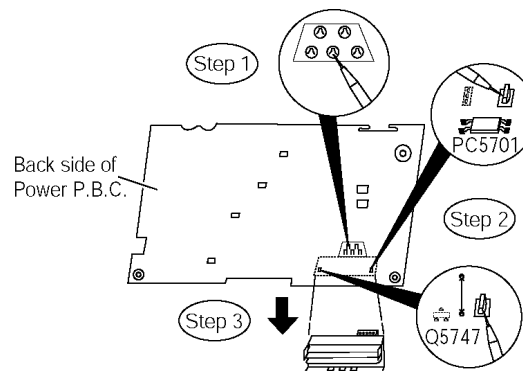
10.15. Disassembly of Switch Regulator IC (IC5701)

• Follow (Step 1) to (Step 7) of Item 10.12.

Step 1 Desolder all pins of IC5701.

Step 2 Desolder 2 pins of Switch Regulator IC.

Step 3 Remove the Switch Regulator IC.

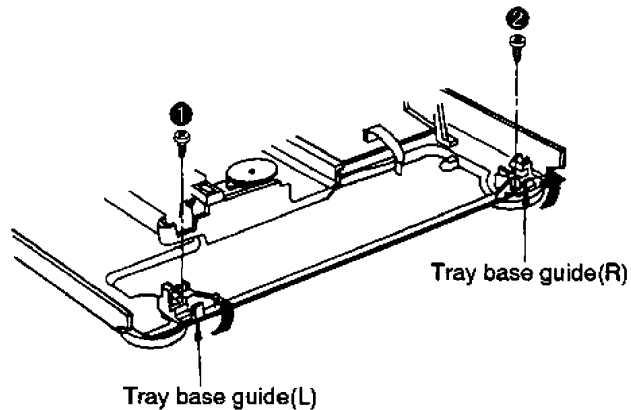


Note: Refer to the diagrams of Power P.C.B. (Section 19.3) for location of the parts.

Caution: Be careful when removing the Switch Regulator IC which has high temperature after prolonged use.

10.16. Disassembly of the Tray Base Guide (L) and Tray Base Guide (R)

· Follow (Step 1) to (Step 3) of Item 10.5.

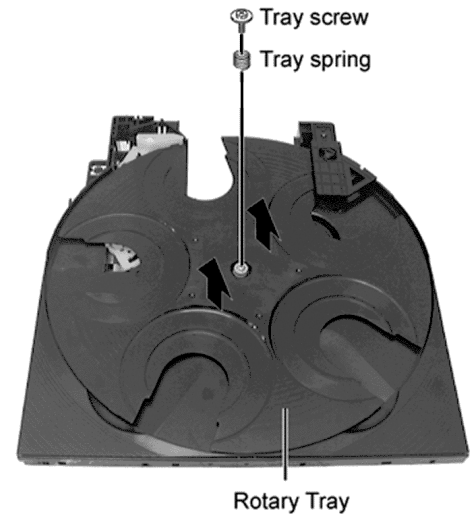


Step 1 Remove the 2 screws.

Step 2 Remove the tray base guide (L) and tray guide (R) in the direction of arrow.

10.17. Disassembly of the Rotary Tray

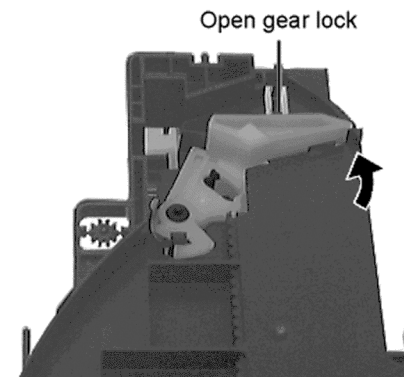
· Follow (Step 1) to (Step 3) of Item 10.5.



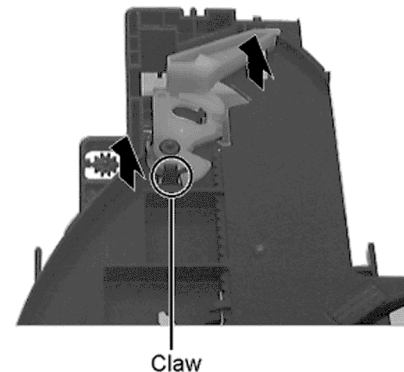
Step 1 Remove tray screw and tray spring.

Step 2 Remove rotary tray.

10.17.1. Disassembly of the Open Lock Gear



Step 1 Rotate open lock gear in the direction of arrow. (Anti-clockwise)

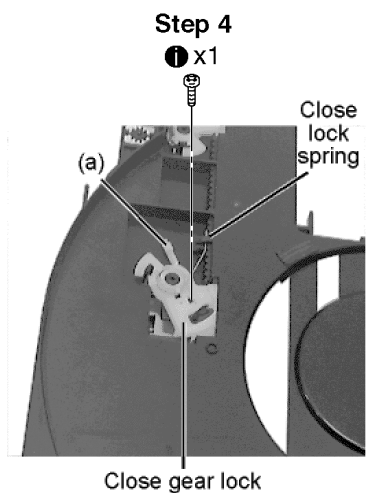


Step 2 Release claw of open lock gear, remove open lock gear in the direction of arrow.

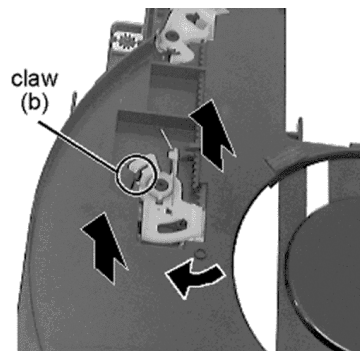
10.17.2. Disassembly of the Close Lock Gear

- Follow (Step 1) to (Step 3) of Item 10.5.

Step 1 Remove 1 screw.



Step 2 Hook close lock spring to claw (a).

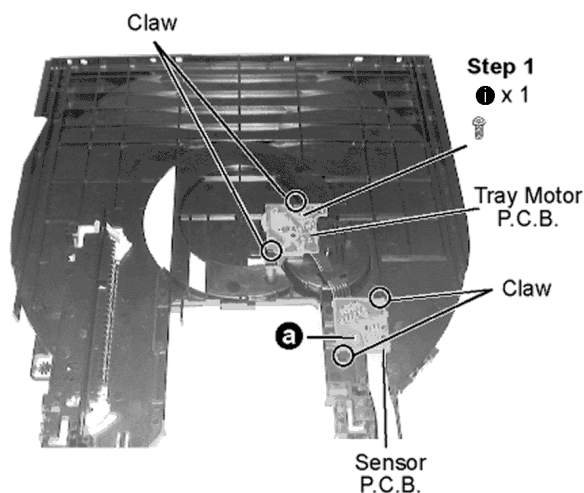


Step 3 Rotate close lock gear to direction of arrow, press claw (b) and pull out close lock gear.

10.17.3. Disassembly of the Tray Motor P.C.B. and Sensor P.C.B.

- Follow (Step 1) to (Step 3) of Item 10.5.

Step 1 Remove 2 screws.

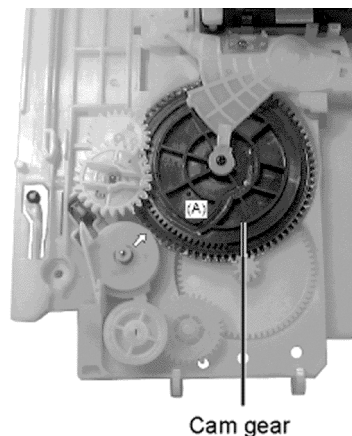


Step 2 Release 4 claws at Tray Motor P.C.B. and Sensor P.C.B.

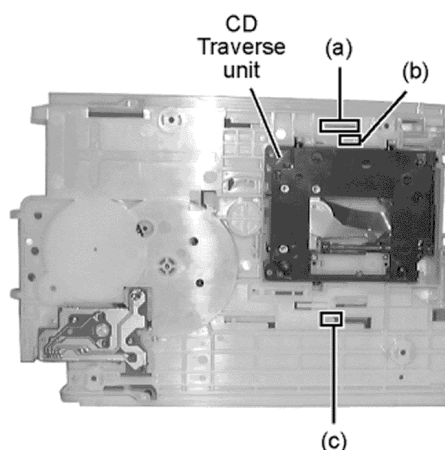
10.18. Disassembly of the Traverse Unit

- Follow the Item 10.7.

Step 1 Rotate cam gear anti-clockwise. (Align at position (A) as marking on gear with arrow)



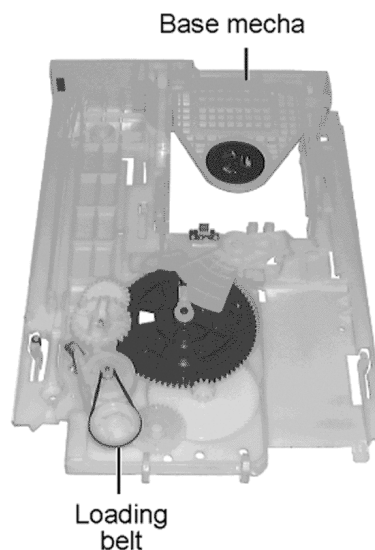
Step 2 Flip the base mecha unit in vertical position.



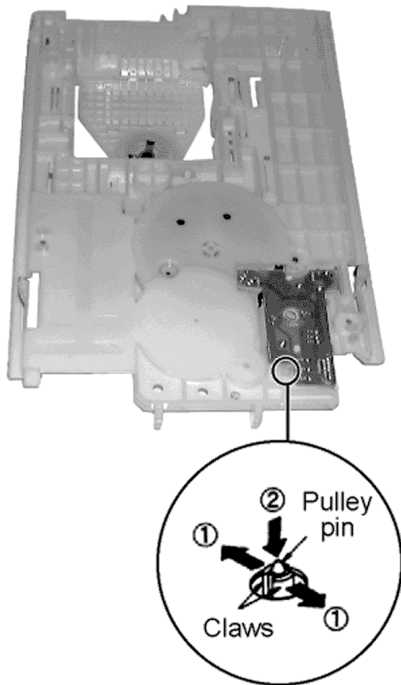
Step 3 Press upward (a), push backward (b) and press to left (c) to release CD traverse unit.

10.18.1. Disassembly of the Pulley Gear

Step 1 Remove of the loading belt.



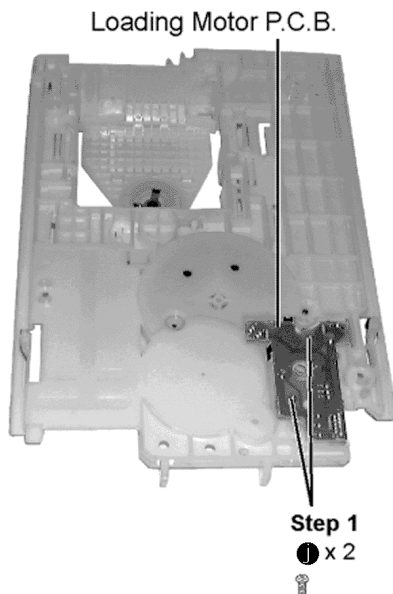
Step 2 Flip the base mecha.



Step 3 Release the 2 claws in the direction of arrow (1), and then push the pulley pin in the direction of arrow (2).

10.18.2. Disassembly of the Loading Motor P.C.B.

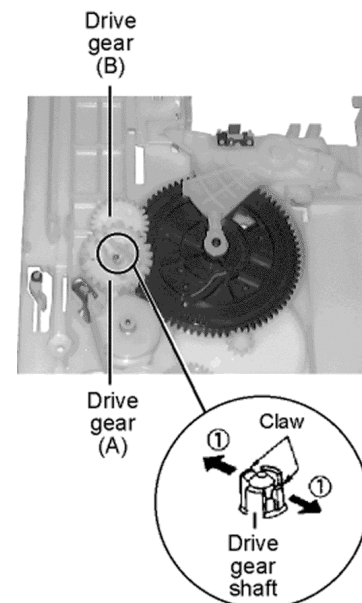
Step 1 Remove 2 screws.



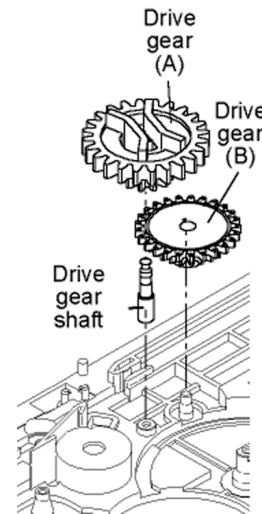
Step 2 Remove Loading Motor P.C.B.

10.18.3. Disassembly of the Drive Gear (A) & (B)

Step 1 Release the claw in the direction of arrow (1), and then push drive gear shaft up.

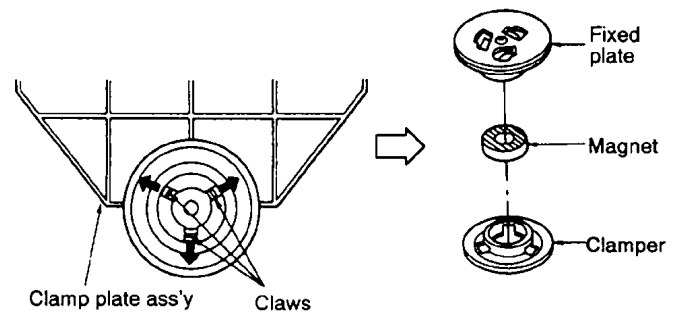


Step 2 Remove Drive Gear (A) and Drive Gear (B).



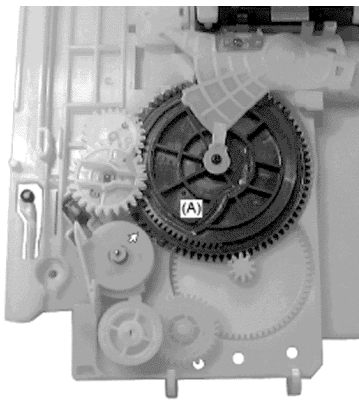
10.18.4. Disassembly of Fixed Plate, Magnet and Clamper

Release 3 claws in the direction of arrow.

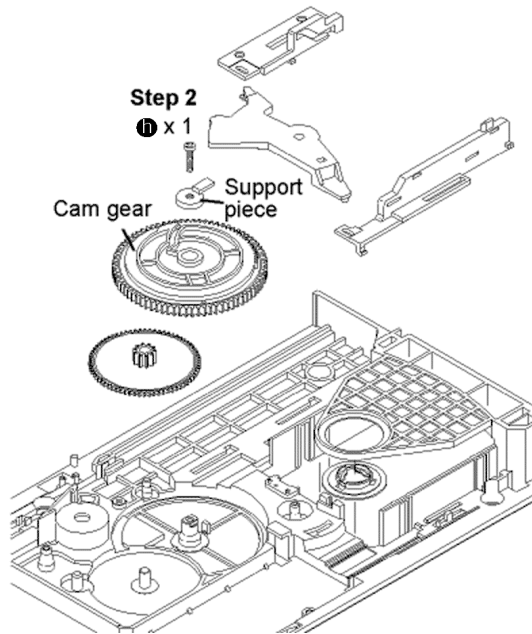


10.18.5. Disassembly of Cam Gear & Support Piece

Step 1 Rotate (A) in cam gear anti-clockwise.

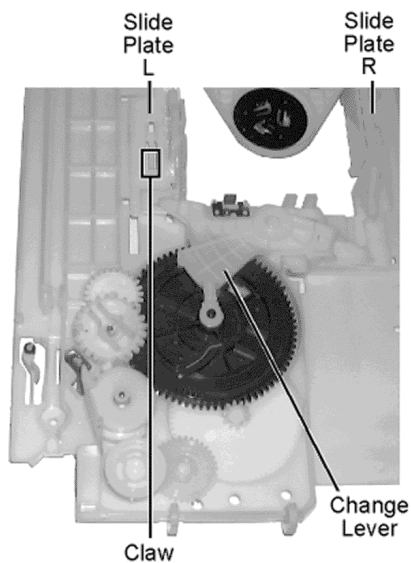


Step 2 Remove 1 screw and support piece.

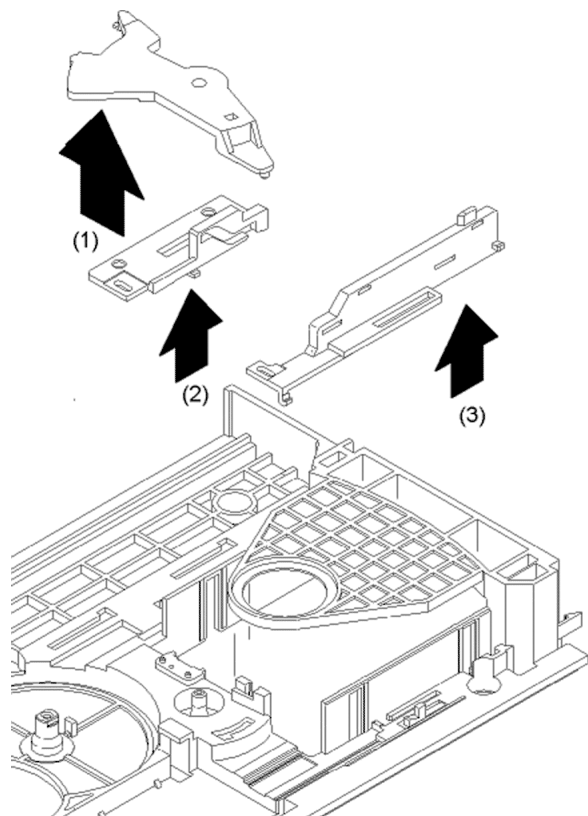


10.18.6. Disassembly of the Slide Plate (L) & (R) and Change Lever

Step 1 Press the claw and push the Slide Plate (L) up.

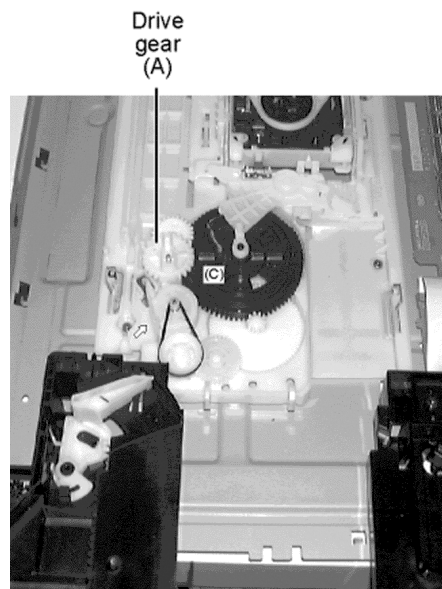


Step 2 Remove slide plate (L) & (R) and change lever as arrow shown.

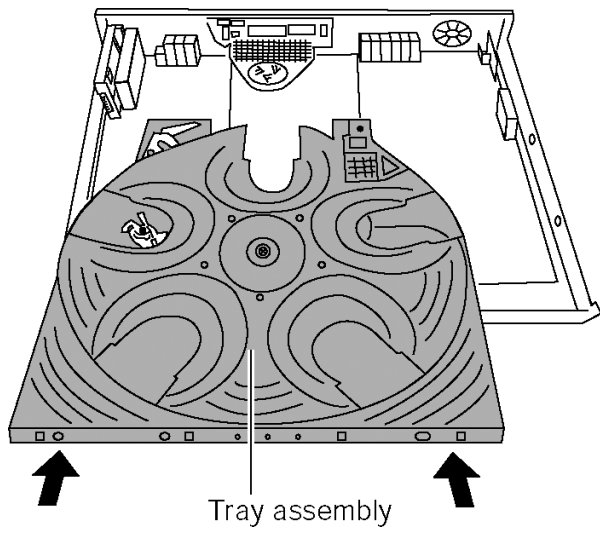


10.19. Assembly of Tray Assembly

Step 1 Rotate cam gear anti-clockwise. Align at position (C) as marking on gear with arrow.



Step 2 Make sure drive gear (A) at vertical position.



Step 3 Push tray assembly to the direction of arrow shown.

11 Service Fixture and Tools

Prepare service tools before process service position.

Service Tools	
Loading Motor P.C.B. - Main P.C.B.	REEX0633 (11 pin)
Sensor P.C.B. - Power P.C.B.	REEX0465 (11 pin)

12 Service Positions

12.1. Checking & Repair Main P.C.B., Power P.C.B., HDMI Module P.C.B., FL and Head phone P.C.B.

- Follow the Item 10.5.
- Follow the (Step 1) - (Step 4) of Item 10.6.
- Follow the (Step 1) - (Step 3) of Item 10.7.
- Follow the (Step 1) - (Step 3) of Item 10.8.
- Follow the (Step 1) - (Step 3) of Item 10.9.
- Follow the (Step 1) - (Step 3) of Item 10.10.
- Follow the (Step 1) - (Step 3) of Item 10.11.

Step 1 Change cable (REEX0524) to extended cable (REEX0633).

Step 2 Change cable (REZ1483) to extended cable (REEX0465).

Step 3 Connect all the cables.

Step 4 Connect 2 fans.

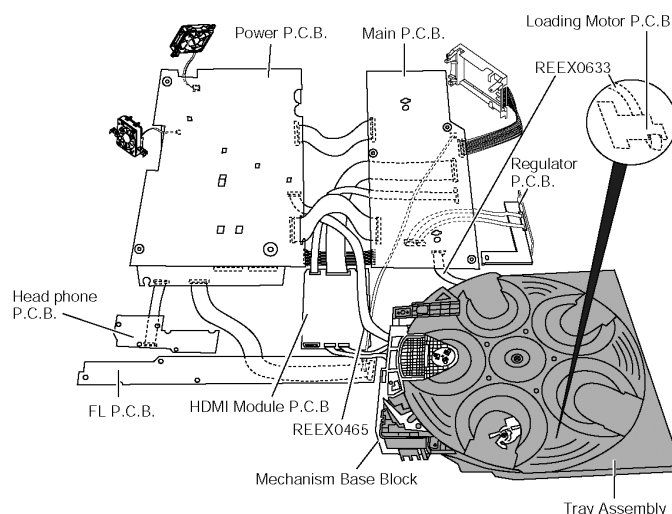
Step 5 Turn over Power P.C.B., Main P.C.B., HDMI module P.C.B., FL P.C.B. and Head phone P.C.B.

Step 6 Position mechanism base block and tray assembly in horizontally.

Step 7 Connect the AC cord and switch on the power.

Step 8 Insert CD into tray assembly.

Step 9 Press DISC SELECTOR button to lock the CD. For example, press "1" of "5 DISC SELECTOR" if the CD is placed at the first disc tray.



13 Measurements and Adjustments

13.1. Service Tools and Equipment

Application	Name	Number
Tilt adjustment	DVD test disc	DVDT-S20 [SPG]
	TORX screw driver (T6)	Available on sales route. (T6) or RFKZ0185 [SPG]
Others	Grease	RFKXPG641 [SPG]
Confirmation	CD test disc	PVCD-K06 or any other commercially available disc
	VCD test disc	PVCD-K06 or any other commercially available disc
	Recovery disc	RFKZD03R005 [SPG]

13.2. Important points in adjustment

13.2.1. Important points in optical adjustment

- Before starting optical adjustment, be sure to take anti-static measures.
 - Optical pickup tilt adjustment is needed after replacement of the following components.
1. Optical pickup unit
 2. Spindle motor unit
 3. Optical pickup peripheral parts

Notes

Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, make adjustment if there is a noticeable degradation in picture quality. Optical adjustments cannot be made inside the optical pickup. Adjustment is generally unnecessary after replacing the traverse unit.

13.2.2. Important points in electrical adjustment

- Follow the adjustment procedures described in this manual.

13.3. Storing and handling of test discs

- Surface precision is vital for DVD test discs. Be sure to store and handle them carefully.
1. Do not place discs directly onto the workbench, etc., after use.
 2. Handle discs carefully in order to maintain their flatness. Place them into their case after use and store them vertically. Store discs in a cool place where they are not exposed to direct sunlight or air from air conditioners.
 3. Accurate adjustment will not be possible if the disc is warped when placed on a surface made of glass, etc. If this happens, use a new test disc to make optical adjustments.
 4. If adjustment is done using a warped disc, the adjustment will be incorrect and some discs will not be playable.

13.4. Optical adjustment

13.4.1. Optical pickup tilt adjustment

Measurement point	Adjustment point	Mode	Disc
	Tangential adjustment screw Tilt adjustment screw	T01 (inner periphery) play T30 (center periphery) T43 (outer periphery) play	DVDT-S20 [SPG]
Measuring equipment	Adjustment value		
None (Main unit display for servicing is used.)		Adjust to the minimum jitter value.	

13.4.1.1. Adjustment procedure

1. While pressing STOP button on the main unit, press "5" on the remote control unit.
2. Confirm that "J_xxx/yyy_zz" (display1/display2) is shown on the front display.

For your information:

"yyy" and "zz" shown to the right have nothing to do with the jitter value. "yyy" is the error counter, while "zz" is the focus drive value.

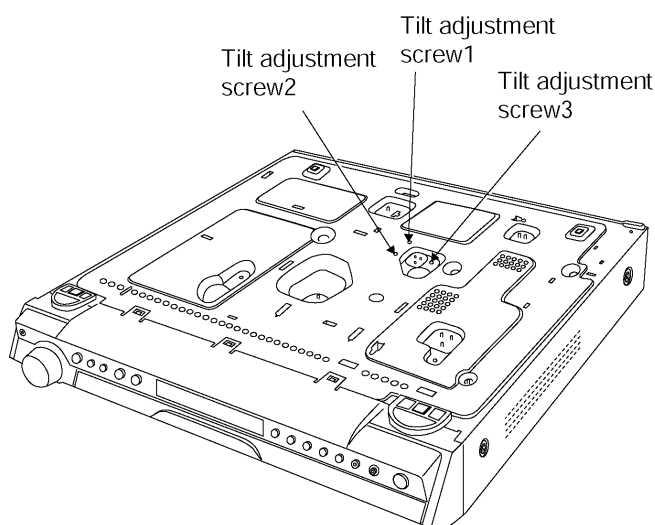
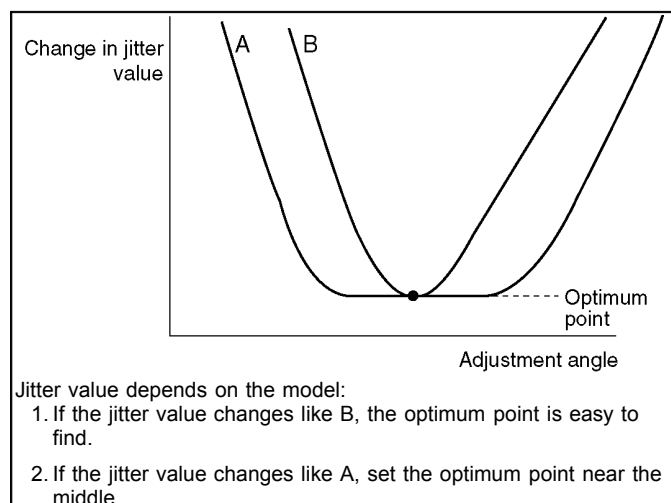
Note:

Jitter value appears on the front display.

3. Play test disc T30 (center periphery).
4. Adjust tangential adjustment screw so that the jitter value is minimized.
5. Play test disc T30 (center periphery).
6. Adjust tilt adjustment screw 1 so that the jitter value is minimized.
7. Play test disc T30 (center periphery).
8. Adjust tilt adjustment screw 2 so that the jitter value is minimized.
9. Repeat adjusting tilt adjustment screws 1 and 2 alternately until the jitter value is minimized.

13.4.1.2. Important points

1. Make tangential adjustment first, and then make tilt adjustment.
2. Repeat adjusting two or three times to find the optimum point.
3. Finish the procedure with tilt adjustment.



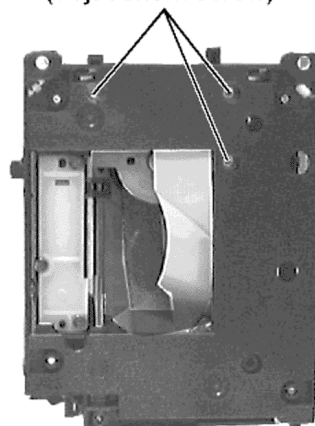
13.4.1.3. Check after adjustment

Play test disc or any other disc to make sure there is no picture degradation in the inner, middle and outer peripheries, and no audio skipping. After adjustment is finished, lock each adjustment screw in position using screw lock.

13.4.1.4. Procedure for screw lock

1. After adjustment, remove top cover, tray, clamper base and traverse unit in this sequence.
2. Lay the traverse unit upside down, and fix adjustment screw with screw lock.
3. After fixing, reassemble traverse unit, clamper base, tray and top cover.

Screw lock
(adjustment screw)



13.5. Abbreviations

INITIAL/LOGO		ABBREVIATIONS
A	A0~UP	ADDRESS
	ACLK	AUDIO CLOCK
	AD0~UP	ADDRESS BUS
	ADATA	AUDIO PES PACKET DATA
	ALE	ADDRESS LATCH ENABLE
	AMUTE	AUDIO MUTE
	AREQ	AUDIO PES PACKET REQUEST
	ARF	AUDIO RF
	ASI	SERVO AMP INVERTED INPUT
	ASO	SERVO AMP OUTPUT
	ASYNC	AUDIO WORD DISTINCTION SYNC
B	BCK	BIT CLOCK (PCM)
	BCKIN	BIT CLOCK INPUT
	BDO	BLACK DROP OUT
	BLKCK	SUB CODE BLOCK CLOCK
	BOTTOM	CAP. FOR BOTTOM HOLD
	BYP	BYPATH
	BYTCK	BYTE CLOCK
C	CAV	CONSTANT ANGULAR VELOCITY
	CBDO	CAP. BLACK DROP OUT
	CD	COMPACT DISC
	CDSCCK	CD SERIAL DATA CLOCK
	CDSRDATA	CD SERIAL DATA
	CDRF	CD RF (EFM) SIGNAL
	CDV	COMPACT DISC-VIDEO
	CHNDATA	CHANNEL DATA
	CKSL	SYSTEM CLOCK SELECT
	CLV	CONSTANT LINEAR VELOCITY
	COFTR	CAP. OFF TRACK
	CPA	CPU ADDRESS
	CPCS	CPU CHIP SELECT
	CPDT	CPU DATA
	CPUADR	CPU ADDRESS LATCH
	CPUADT	CPU ADDRESS DATA BUS
	CPUIRQ	CPU INTERRUPT REQUEST
	CPRD	CPU READ ENABLE
	CPWR	CPU WRITE ENABLE
	CS	CHIP SELECT
	CSYNCIN	COMPOSITE SYNC IN
	CSYNCOUT	COMPOSITE SYNC OUT
D	DACCK	D/A CONVERTER CLOCK
	DEEMP	DEEMPHASIS BIT ON/OFF
	DEMPH	DEEMPHASIS SWITCHING
	DIG0~UP	FL DIGIT OUTPUT
	DIN	DATA INPUT
	DMSRCK	DM SERIAL DATA READ CLOCK
	DMUTE	DIGITAL MUTE CONTROL
	DO	DROP OUT
	DOUT0~UP	DATA OUTPUT
	DRF	DATA SLICE RF (BIAS)
	DRPOUT	DROP OUT SIGNAL
	DREQ	DATA REQUEST
	DRESP	DATA RESPONSE
	DSC	DIGITAL SERVO CONTROLLER
	DSLIF	DATA SLICE LOOP FILTER
	DVD	DIGITAL VIDEO DISC

INITIAL/LOGO		ABBREVIATIONS
E	EC	ERROR TORQUE CONTROL
	ECR	ERROR TORQUE CONTROL
	ENCSEL	ENCODER SELECT
	ETMCLK	EXTERNAL M CLOCK (81MHz/40.5MHz)
	ETSCLK	EXTERNAL S CLOCK (54MHz)
F	FBAL	FOCUS BALANCE
	FCLK	FRAME CLOCK
	FE	FOCUS ERROR
	FFI	FOCUS ERROR AMP INVERTED INPUT
	FEO	FOCUS ERROR AMP OUTPUT
	FG	FREQUENCY GENERATOR
	FSC	FREQUENCY SUB CARRIER
G	FSC	FS (384 OVER SAMPLING) CLOCK
	GND	COMMON GROUNDING (EARTH)
H	HA0~UP	HOST ADDRESS
	HD0~UP	HOST DATA
	HINT	HOST INTERRUPT
	HRXW	HOST READ/WRITE
I	IECOUT	IEC958 FORMAT DATA OUTPUT
	IPFRAG	INTERPOLATION FLAG
	IREF	I (CURRENT) REFERENCE
	ISEL	INTERFACE MODE SELECT
L	LDON	LASER DIODE CONTROL
	LPC	LASER POWER CONTROL
	LRCK	L CH/R CH DISTINCTION CLOCK
M	MA0~UP	MEMORY ADDRESS
	MCK	MEMORY CLOCK
	MCKI	MEMORY CLOCK INPUT
	MCLK	MEMORY SERIAL COMMAND CLOCK
	MDATA	MEMORY SERIAL COMMAND DATA
	MDQ0~UP	MEMORY DATA INPUT/OUTPUT
	MDQM	MEMORY DATA I/O MASK
	MLD	MEMORY SERIAL COMMAND LOAD
	MPEG	MOVING PICTURE EXPERTS GROUP
O	ODC	OPTICAL DISC CONTROLLER
	OFTR	OFF TRACKING
	OSCI	OSCILLATOR INPUT
	OSCO	OSCILLATOR OUTPUT
	OSD	ON SCREEN DISPLAY
P	P1~UP	PORT
	PCD	CD TRACKING PHASE DIFFERENCE
	PCK	PLL CLOCK
	PDVD	DVD TRACKING PHASE DIFFERENCE
	PEAK	CAP. FOR PEAK HOLD
	PLLCLK	CHANNEL PLL CLOCK
	PLLOK	PLL LOCK
	PWMCTL	PWM OUTPUT CONTROL
	PWMDA	PULSE WAVE MOTOR DRIVE A
	PWMOA, B	PULSE WAVE MOTOR OUT A, B

INITIAL/LOGO		ABBREVIATIONS
R	RE	READ ENABLE
	RFENV	RF ENVELOPE
	RFO	RF PHASE DIFFERENCE OUTPUT
	RS	(CD-ROM) REGISTER SELECT
	RSEL	RF POLARITY SELECT
	RST	RESET
S	RSV	RESERVE
	SBI0, 1	SERIAL DATA INPUT
	SBO0	SERIAL DATA OUTPUT
	SBT0, 1	SERIAL CLOCK
	SCK	SERIAL DATA CLOCK
	SCKR	AUDIO SERIAL CLOCK RECEIVER
	SCL	SERIAL CLOCK
	SCLK	SERIAL CLOCK
	SDA	SERIAL DATA
	SEG0~UP	FL SEGMENT OUTPUT
	SELCLK	SELECT CLOCK
	SEN	SERIAL PORT ENABLE
	SIN1, 2	SERIAL DATA IN
	SOUT1, 2	SERIAL DATA OUT
	SPDI	SERIAL PORT DATA INPUT
	SPDO	SERIAL PORT DATA OUTPUT
	SPEN	SERIAL PORT R/W ENABLE
	SPRCLK	SERIAL PORT READ CLOCK
	SPWCLK	SERIAL PORT WRITE CLOCK
	SQCK	SUB CODE Q CLOCK
	SQCX	SUB CODE Q DATA READ CLOCK
	SRDATA	SERIAL DATA
	SRMADR	SRAM ADDRESS BUS
	SRMDT0~7	SRAM DATA BUS 0~7
	SS	START/STOP
	STAT	STATUS
	STCLK	STREAM DATA CLOCK
	STD0~UP	STREAM DATA
	STENABLE	STREAM DATA INPUT ENABLE
	STSEL	STREAM DATA POLARITY SELECT
	STVALID	STREAM DATA VALIDITY
	SUBC	SUB CODE SERIAL
	SBCK	SUB CODE CLOCK
	SUBQ	SUB CODE Q DATA
	SYSCLK	SYSTEM CLOCK
T	TE	TRACKING ERROR
	TIBAL	BALANCE CONTROL
	TID	BALANCE OUTPUT 1
	TIN	BALANCE INPUT
	TIP	BALANCE INPUT
	TIS	BALANCE OUTPUT 2
	TPSN	OP AMP INPUT
	TPSO	OP AMP OUTPUT
	TPSP	OP AMP INVERTED INPUT
	TRCRS	TRACK CROSS SIGNAL
	TRON	TRACKING ON
	TRSON	TRAVERSE SERVO ON

INITIAL/LOGO		ABBREVIATIONS
V	VLANK	V BLANKING
	VCC	COLLECTOR POWER SUPPLY VOLTAGE
	VCDCONT	VIDEO CD CONTROL (TRACKING BALANCE)
	VDD	DRAIN POWER SUPPLY VOLTAGE
	VFB	VIDEO FEED BACK
	VREF	VOLTAGE REFERENCE
W	VSS	SOURCE POWER SUPPLY VOLTAGE
	WAIT	BUS CYCLE WAIT
	WDCK	WORD CLOCK
	WEH	WRITE ENABLE HIGH
X	WSR	WORD SELECT RECEIVER
	X	X' TAL
	XALE	X ADDRESS LATCH ENABLE
	XAREQ	X AUDIO DATA REQUEST
	XCDROM	X CD ROM CHIP SELECT
	XCS	X CHIP SELECT
	XCSYNC	X COMPOSITE SYNC
	XDS	X DATA STROBE
	XHSYNCO	X HORIZONTAL SYNC OUTPUT
	XHINT	XH INTERRUPT REQUEST
	XI	X' TAL OSCILLATOR INPUT
	XINT	X INTERRUPT
	XMW	X MEMORY WRITE ENABLE
	XO	X' TAL OSCILLATOR OUTPUT
	XRE	X READ ENABLE
	XSRMCE	X SRAM CHIP ENABLE
	XSRMOE	X SRAM OUTPUT ENABLE
	XSRMWE	X SRAM WRITE ENABLE
	XVCS	X V-DEC CHIP SELECT
	XVDS	X V-DEC CONTROL BUS STROBE
	XVSYNCO	X VERTICAL SYNC OUTPUT

14 Voltage and Waveform Chart

14.1. HDMI Module P.C.B.

RefNo.	IC3701																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0.1	0.1	0.1	0.1	0.1	0.1	3.4	0.1	3.4	0.3	0.1	0.1	3.3	3.2	0.1	0.1	3.4	3.4	1.1
RefNo.	IC3701																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.3	0.1	0	0.1	0.1	0	3.4	4.6	0.1	0.1	1.8	1.7	0.1	0.1	0.1	0.1	0.1	0.1	0	0
RefNo.	IC3701																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.1	0.1	3.4	-	0.1	3.4	1.6	0.1	3.4	3.4	1.6	3.4	3.4	1.4	3.4	0.1	0.1	0.3	0.1	3.4
RefNo.	IC3701																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.4	1.3	0.2	0.2	1.5	0.1	3.4	1.6	1.5	0.1	0.1	3.4	3.4	3.4	1.6	0.1	0.1	3.4	3.4	0.1
RefNo.	IC3701																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.1	0.1	0.1	0.1	0.1	3.4	3.4	1.5	1.5	1.5	0.1	0.2	1.6	0.1	0.1	3.4	3.4	1.5	3.4	3.4
RefNo.	IC3701																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0.1	0.1	0.1	3.3	3.4	1.5	0.1	0.1	0.1	1.5	3.4	1.4	1.5	3.4	3.4	1.5	1.5	0.1	0.1	1.5
RefNo.	IC3701																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	3.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	3.4	0.1	0.1	0.1
RefNo.	IC3701																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.4	3.4	1.6	0.9	0.8	1.6	0.1	0.1	1.4	1.6	1.9
RefNo.	IC3701																			
MODE	161	162	163	164																
CD PLAY	1.6	0.2	0.1	0.1																
RefNo.	IC3782																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	1.9	-	1.3	0.1	2.5	-	-	3.1												
RefNo.	IC3901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.1	3.2	0.1	1.9	1.7	1.7	0.1	0.1	0.1	0.1	1.7	1.7	3.4	0.1	0.1	1.9	3.4	0.1	3.4	3.4
RefNo.	IC3901																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.1	0.1	3.4	3.4	0.1	0.4	3.4	3.4	1.6	0.1	0.1	1.4	1.4	3.4	1.8	0.1	3.4	3.4	0.1	0.1
RefNo.	IC3901																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.1	0.1	3.4	3.4	1.9	0.1	0.1	3.4	2.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.8	0.1
RefNo.	IC3901																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0.1	2.6	0.1	0.1	0.1	1.8	0.1	0.1	0.1	0.1	3.4	0.1	0.1	1.9	0.1	0.1	0.1	0.1	0.1	0.1
RefNo.	IC3931																			
MODE	1	2	3	4	5															
CD PLAY	3.3	0.1	0.1	0.1	3.4															
RefNo.	IC3952																			
MODE	1	2	3	4	5															
CD PLAY	8.7	0.1	1.2	5.1	9.1															
RefNo.	IC8001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.1	0.1	3.4	0.1	0.1	0.1	0.1	3.4	3.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.4	0.1
RefNo.	IC8001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0.1	3.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.3	0.1	0.1	1.2	1.3	1.3	0.1	1.3
RefNo.	IC8001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.1	0.1	0.1	0.1	0.2	0.1	3.4	0.1	0.1	0.1	0.1	0.1	0.1	3.4	3.4	3.4	0.1	0.1	0.1	0.1
RefNo.	IC8001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0.1	0.1	3.4	3.4	0.1	3.4	3.4	0.1	3.4	3.4	3.4	0.1	0.2	3.4	3.4	3.4	1.7	3.0	0.1	3.4
RefNo.	IC8001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	3.4	0.1	1.2	3.4	0.1	3.4	0.1	0.1	3.4	1.2	1.7	0.1	3.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
RefNo.	IC8001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	0.1	3.4	1.0	0.1	2.4	1.9	0.2	0.1	0.1	3.4	1.2	0.4	1.8	1.9	0.1	0.3	0.2	0.1	3.4	3.4
RefNo.	IC8001																			
MODE	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
CD PLAY	3.4	0.1	0.1	0.1	0	0	2.3	1.7	2.3	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	1.7
RefNo.	IC8001																			
MODE	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160
CD PLAY	1.7	1.7	0.9	1.7	1.7	3.4	1.0	1.0	0.4	3.4	1.8	1.0	1.0	1.8	1.8	0	0.7	3.4	0.3	0
RefNo.	IC8001																			
MODE	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
CD PLAY	3.4	0.1	1.6	1.7	1.4	1.2	1.6	1.7	1.3	0.1	0.1	0.6	0.9	1.7	0.1	3.4	1.1	1.0	1.4	1.4
RefNo.	IC8001																			
MODE	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200
CD PLAY	1.4	1.6	1.3	3.0	0.1	1.7	3.4	3.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.4	3.0	1.9	2.8
RefNo.	IC8001																			
MODE	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220
CD PLAY	2.5	3.1	2.8	3.4	3.4	0.1	3.4	3.2	3.4	3.4	3.2	1.8	1.9	3.2	3.4	0.2	1.1	2.9	2.9	2.9
RefNo.	IC8001																			
MODE	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
CD PLAY	3.4	0.1	0.3	3.4	1.7	0.1	3.4	3.4	3.4	0	0	0	0.1	1.7	0.1	0.1	0.1	0.1	3.1	1.6
RefNo.	IC8001																			
MODE	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256				
CD PLAY	0.1	1.7	0.1	1.7	0.1	1.6	1.4	1.4	0.1	3.4	0.1	0.1	0.1	0.1	0.1	0.1				

RefNo.	IC8051																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.4	2.9	3.4	3.1	3.0	1.0	3.0	3.3	3.4	3.0	2.9	1.0	2.8	3.4	2.6	3.3	3.3	3.3	3.1	1.9
RefNo.	IC8051																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	1.7	0.2	0.1	0.2	0.2	1.4	3.4	0.1	1.6	1.7	1.7	1.6	1.0	0.1	0.1	-	3.4	1.7	2.7	-
RefNo.	IC8051																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54						
CD PLAY	0.1	3.0	3.4	3.2	3.1	0.1	3.0	3.4	2.9	2.9	2.9	0.1	3.1	0.1						
RefNo.	IC8111																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	3.4	-	0.1	2.0	5.0	-	-	4.9												
RefNo.	IC8151																			
MODE	1	2	3	4	5															
CD PLAY	3.1	3.1	0.1	1.3	0.8															
RefNo.	IC8251																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	1.7	1.7	2.1	2.2	2.0	0.1	4.9	3.4	0.1	2.4	2.6	2.5	2.5	4.3	4.3	5.2	3.5	0	3.4
RefNo.	IC8251																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	9.1	8.9	1.8	1.7	1.7	1.7	3.4	4.9												
RefNo.	IC8421																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	5.0	3.4	3.0	3.4	1.0	1.0	1.7	5.0	0	1.0	0.1	0.1	0	0	2.5	2.5	5.0	0.1	2.5	2.5
RefNo.	IC8421																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	2.6	2.1	5.0	0	2.5	2.5	2.5	0												
RefNo.	IC8601																			
MODE	1	2	3	4																
CD PLAY	3.3	1.2	0.1	0.1																
RefNo.	IC8606																			
MODE	1	2	3	4	5															
CD PLAY	3.4	3.4	0.1	0.1	-															
RefNo.	IC8611																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	0.1	0.1	0.1	0.1	3.3	3.3	0.1	3.4												
RefNo.	IC8651																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	0.1	0.1	3.4	3.4	3.4	3.4	1.0	0.1	0.1	3.4	3.4	3.4
RefNo.	IC8651																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	3.4	3.4	3.4	3.4	3.4	3.4	0.1	3.9	1.3	1.5	0.7	1.5	1.0	1.1	1.3	3.4	1.6	1.1	1.0	1.0
RefNo.	IC8651																			
MODE	41	42	43	44	45	46	47	48												
CD PLAY	1.0	1.6	1.1	1.2	1.3	0.1	3.4	1.4												
RefNo.	IC8691					IC8695					IC8701									
MODE	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5			
CD PLAY	3.0	3.0	0.1	4.4	4.9		2.8	2.9	0.1	4.0	4.9		-	1.7	0.1	1.5	3.4			
RefNo.	Q3901					Q3902					Q3903									
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0.2	4.6	0.7		3.4	5.1	3.4		3.4	5.1	3.4									
RefNo.	Q8551					Q8552					Q8561					Q8562				
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	0.1	5.0	1.0		5.0	1.0	5.0		1.0	2.1	1.6		4.6	2.1	4.0					
RefNo.	QR8111					QR8420					QR8571									
MODE	1	2	3	4	5	6		E	C	B		E	C	B						
CD PLAY	0.1	0.1	1.3	0.1	0.1	5.0		0.1	4.1	0.1		3.4	3.3	0.1						

14.2. Main P.C.B.

RefNo.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	2.9	4.9	0	2.0	3.4	0.7	1.9	2.4	4.9	5.0	-	2.3	0	0	5.0	0	4.9	4.9	4.9
STANDBY	0	2.9	4.9	0	2.0	3.4	0.7	2.0	2.4	4.9	4.9	-	2.3	0	0	4.9	0	4.8	4.9	0
RefNo.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0	4.8	4.8	-	0.2	0.1	3.2	4.9	4.9	4.7	0	0	0	0.7	4.9	4.9
STANDBY	0	0	0	0	0	4.8	-	-	0.2	0.1	3.2	4.9	4.9	4.7	0	0	0	0.7	4.9	4.9
RefNo.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	4.9	3.1	4.2	4.6	0	4.9	0	0	4.9	0	0	4.9	0	0	0	0	0	0	4.9	0
STANDBY	4.9	3.1	4.3	4.7	5.3	4.9	0	0	4.9	4.5	0	4.9	0	0	0	0	0	0	4.9	0
RefNo.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	4.9	0	0	4.9	0	4.8	0	4.8	4.7	4.8	4.8	0	0	0	0	0	0	0	0	0
STANDBY	4.9	0	0	4.8	0	4.8	0	4.8	4.6	4.9	4.8	0	0	0	0	0	0	0	0	0
RefNo.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	4.9	0	0	0	0	0	3.8	0	4.6	0.6	0	0	4.9	0	0	0	0	0	0	4.9
STANDBY	4.9	0	0	0	0	0	3.7	0	4.6	0.7	0	0	4.9	0	0	0	0	0	0	4.9
RefNo.	IC2003																			
MODE	1	2	3	4	5	6	7	8	9											
CD PLAY	0	0.3	0	0.3	8.7	9.1	0	0	0											
STANDBY	0	0.3	0	0.3	8.6	9.1	0	0	0											
RefNo.	IC2004																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	-	4.9	0	0	0	0	0	-												
STANDBY	-	4.9	0	0	0	0	0	-												
RefNo.	IC2102																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	-0.1	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RefNo.	IC2102																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	0	0	0	0	0	0	-0.1	0	0	0	0	-0.1	0	0	0	0	0	0
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RefNo.	IC2102																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	0	0	0	0	1.4	-0.1	0	0	0	0	0	0.2	-	-	-0.1
STANDBY	0	0	0	0	0	0	0	0	0	1.4	0	0	0	0	0	0	0	-	-	-0.1
RefNo.	IC2102																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	-0.1	0	0	4.9	0	5.1	0	0	0	0	0	-0.1	0	0	0	0	0	0	0	0
STANDBY	-0.1	0	0	4.9	0	5.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RefNo.	IC2102																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	-0.1	0	0	-6.9	6.9	0	0	-0.1	-	-	0	0	0	0	0	0	-0.1	0	0
STANDBY	0	0	0	0	-6.9	6.9	0	0	0	-	-	0	0	0	0	0	0	0	0	0
RefNo.	IC2103																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	-0.1	-0.1	-0.1	-6.9	0	0	0	6.9												
STANDBY	0	0	0	-6.9	0	0	0	6.9												
RefNo.	IC2105																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	0	0	6.9	0	0	0	0	0	0	-6.9	0	0	0						
STANDBY	0	0	0	6.9	0	0	0	0	0	0	-6.9	0	0	0						
RefNo.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	4.9	0	0	2.1	4.7	1.6	0	1.6	2.1	0	1.6	0	2.1	4.7	2.1	4.9	2.2	2.2	0	2.2
STANDBY	4.9	0	0	2.1	4.7	1.5	0	1.5	2.1	0	1.6	0	2.1	4.7	2.1	4.9	2.2	2.2	0	2.2
RefNo.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32								
CD PLAY	2.2	0	1.5	1.7	0	1.5	2.0	0	1.6	1.8	0	2.2								
STANDBY	2.2	0	1.4	1.7	0	1.4	1.7	0	1.5	1.8	0	2.2								
RefNo.	IC2903																			
MODE	1	2	3	4	5		1	2	3											
CD PLAY	3.2	1.0	0	-	13.4		9.1	0	5.0											
STANDBY	3.2	1.0	0	-	13.6		9.1	0	5.0											
RefNo.	IC2906																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	0	0.1	0	0.1	0	0	-6.9	-0.1	0	0	0	0	0	0.1	0.1	6.9				
STANDBY	0	0	0.2	0.1	0.1	0	-6.9	0	0	0	0.1	0	0.1	0.1	0.1	6.9				
RefNo.	IC2907																			
MODE	1	2	3		1	2	3													
CD PLAY	6.1	5.0	0		6.1	5.0	0													
STANDBY	6.1	5.0	0		6.1	5.0	0													
RefNo.	Q2001																			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	0	4.5		0	4.9	0		0	0	4.1			4.9	4.8	0		0	-	0
STANDBY	0	0	4.5		0	4.9	0		0	5.3	0			4.9	4.8	0		0	-	0
RefNo.	Q2101																			
MODE	1	2	3	4	5	6		E	C	B		1	2	3	4	5	6			
CD PLAY	0	-4.7	0	-0.1	-4.7	-0.1		0	-4.7	-0.1		0	-0.1	0	0	-0.1	0			
STANDBY	0	0.6	0	0	0.6	0		1.7	1.7	0		0	-0.8	0	0	-0.8	0			
RefNo.	Q2308																			
MODE	1	2	3	4	5	6		E	C	B		E	C	B		E	C	B		
CD PLAY	0	-0.9	0	0	-0.9	0		0	0	4.6		0	-0.1	0		0	0	0.7		
STANDBY	0	-0.8	0	0	-0.8	0		0	0	4.5		0	-0.7	0		0	0	0.7		
RefNo.	Q2603																			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0.8	0.7	0		0	4.9	-2.5		6.9	18.6	7.5		5.6	9.1	6.3		-6.9	-18.6	-7.4	
STANDBY	0.8	0.7	0		0	4.9	-2.5		7.0	18.7	7.5		5.6	9.1	6.3		-6.9	-18.6	-7.4	
RefNo.	Q2907																			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	0	-7.4	-0.6		0	4.9	-2.6		0	0	0.6		0	0	0.6		0	0	0.6	
STANDBY	0	-7.4	-0.6		0	4.9	-2.6		0	0	0.7		0	0	0.7		0	0	0.7	
RefNo.	Q2914																			
MODE	E	C	B		E	C	B													
CD PLAY	5.6	5.6	5.0		3.3	4.4	3.9													
STANDBY	5.6	5.6	5.0		-	-	-													

14.4. FL P.C.B.

50

14.5. Loading Motor P.C.B., Tray Motor P.C.B., Sensor P.C.B., Regulator P.C.B.

Loading Motor P.C.B.

Ref No.	Q9001																		
MODE	1	2	3	4															
CD PLAY	1.2	4.5	0	0															
STANDBY	0.2	4.8	0	0															

Tray Motor P.C.B.

Ref No.	Q9101					Q9102													
MODE	1	2	3	4		1	2	3	4										
CD PLAY	1.2	0	4.7	0		2.5	1.2	0.1	0										
STANDBY	0.1	0	4.8	0		0.4	-0.2	4.8	0										

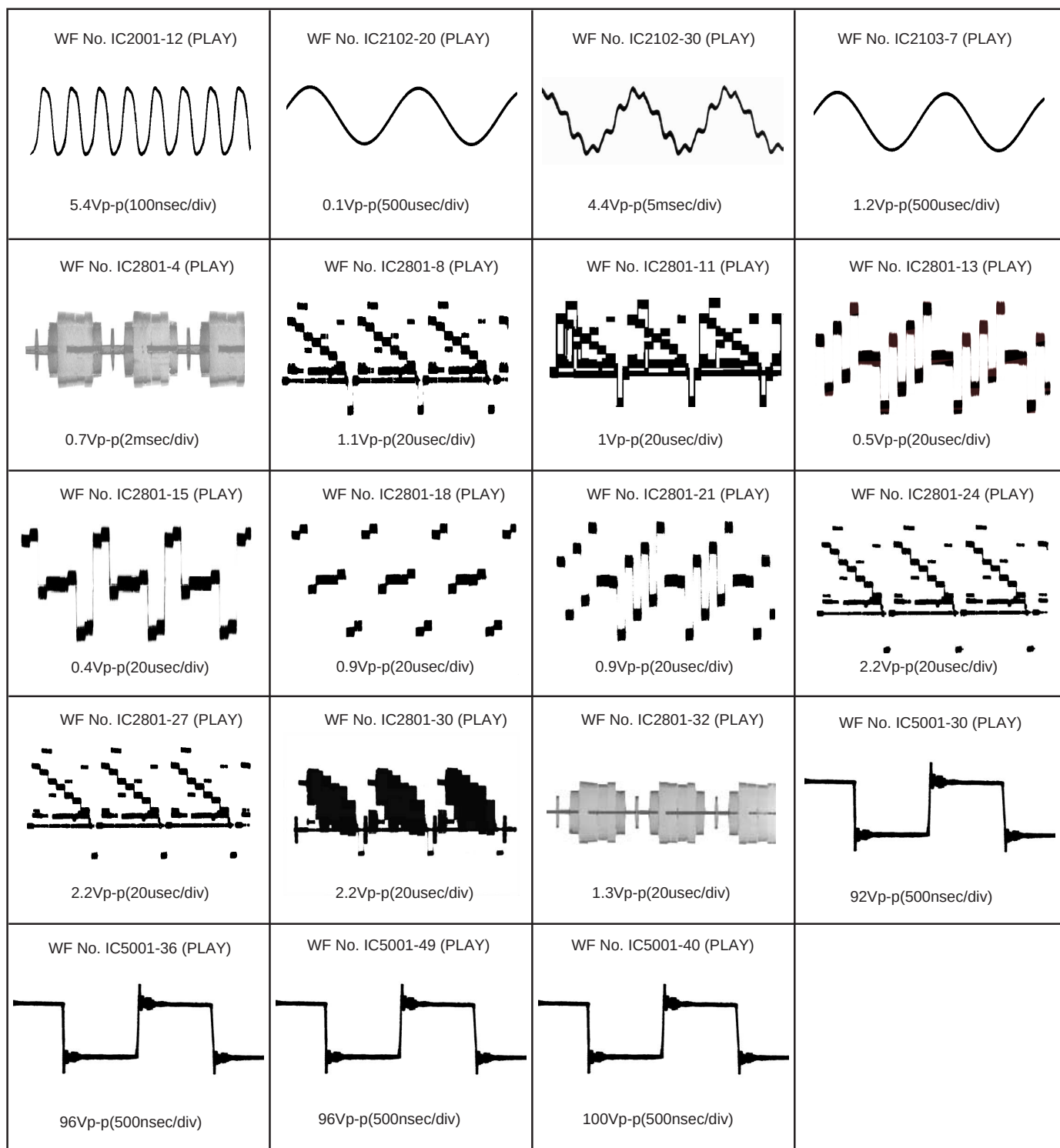
Sensor P.C.B.

Ref No.	Q9103																		
MODE	1	2	3	4															
CD PLAY	3.7	2.5	0	0.2															
STANDBY	0.2	0.4	0	4.7															

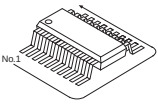
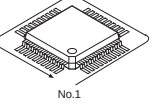
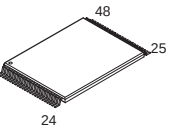
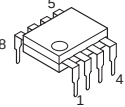
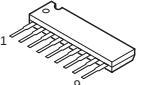
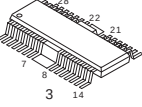
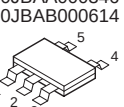
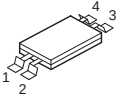
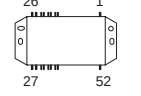
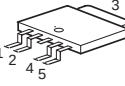
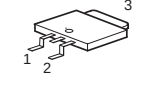
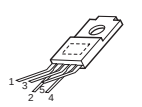
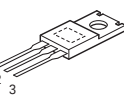
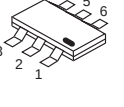
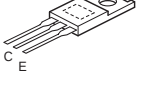
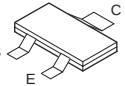
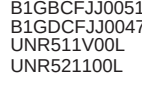
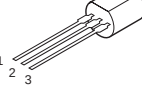
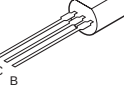
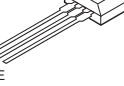
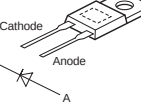
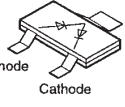
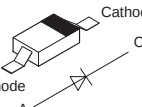
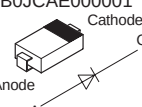
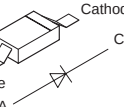
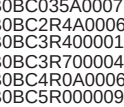
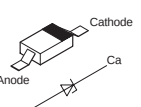
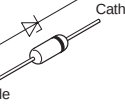
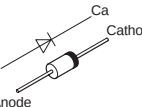
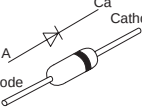
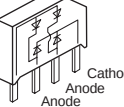
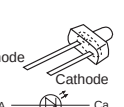
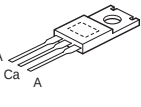
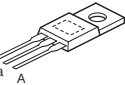
Regulator P.C.B.

Ref No.	IC2901					IC2902													
MODE	1	2	3	4		1	2	3											
CD PLAY	3.7	2.5	0	0.2		12.1	0	9.1											
STANDBY	0.2	0.4	0	4.7		12.7	0	9.1											

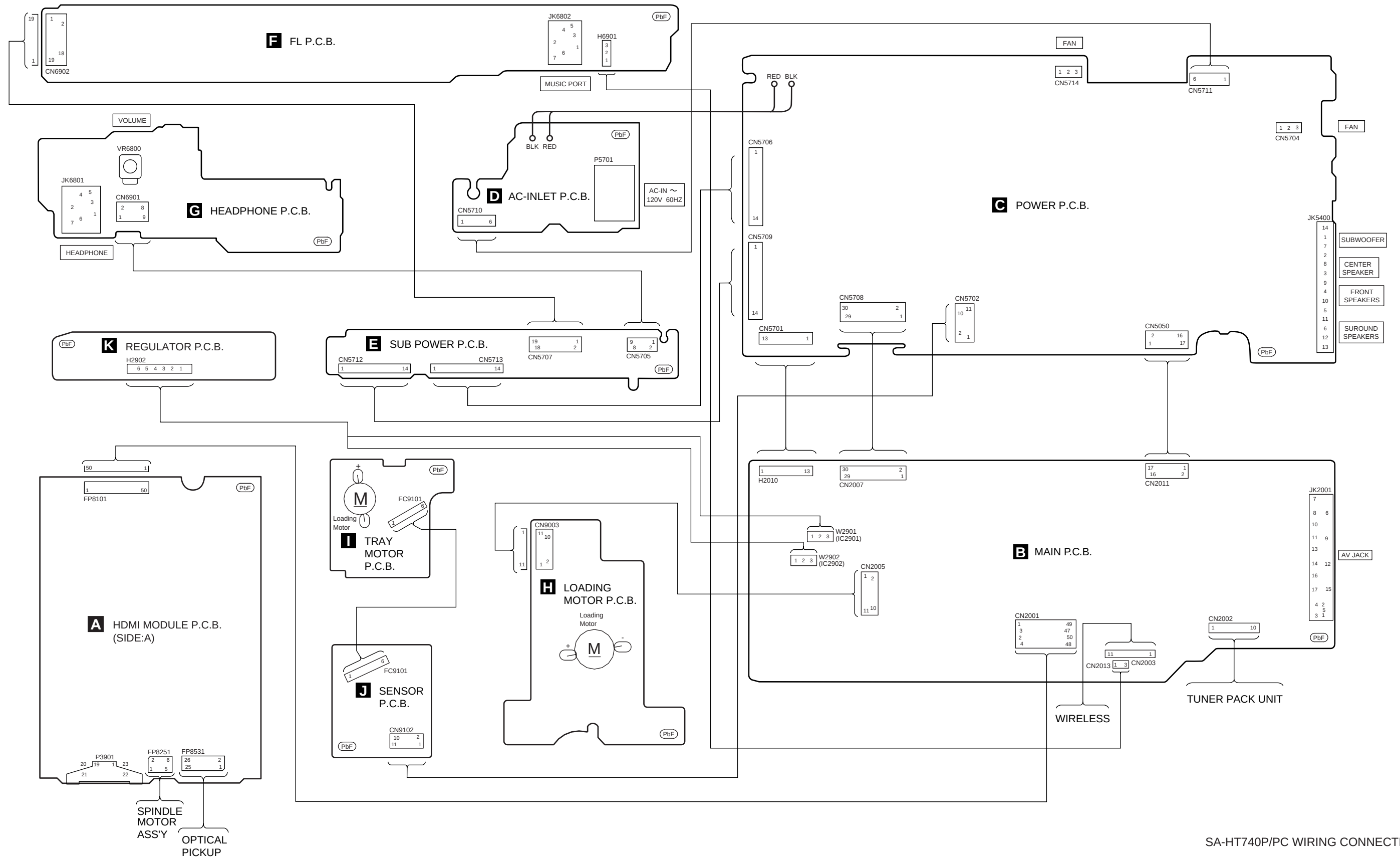
14.6. Waveform Chart



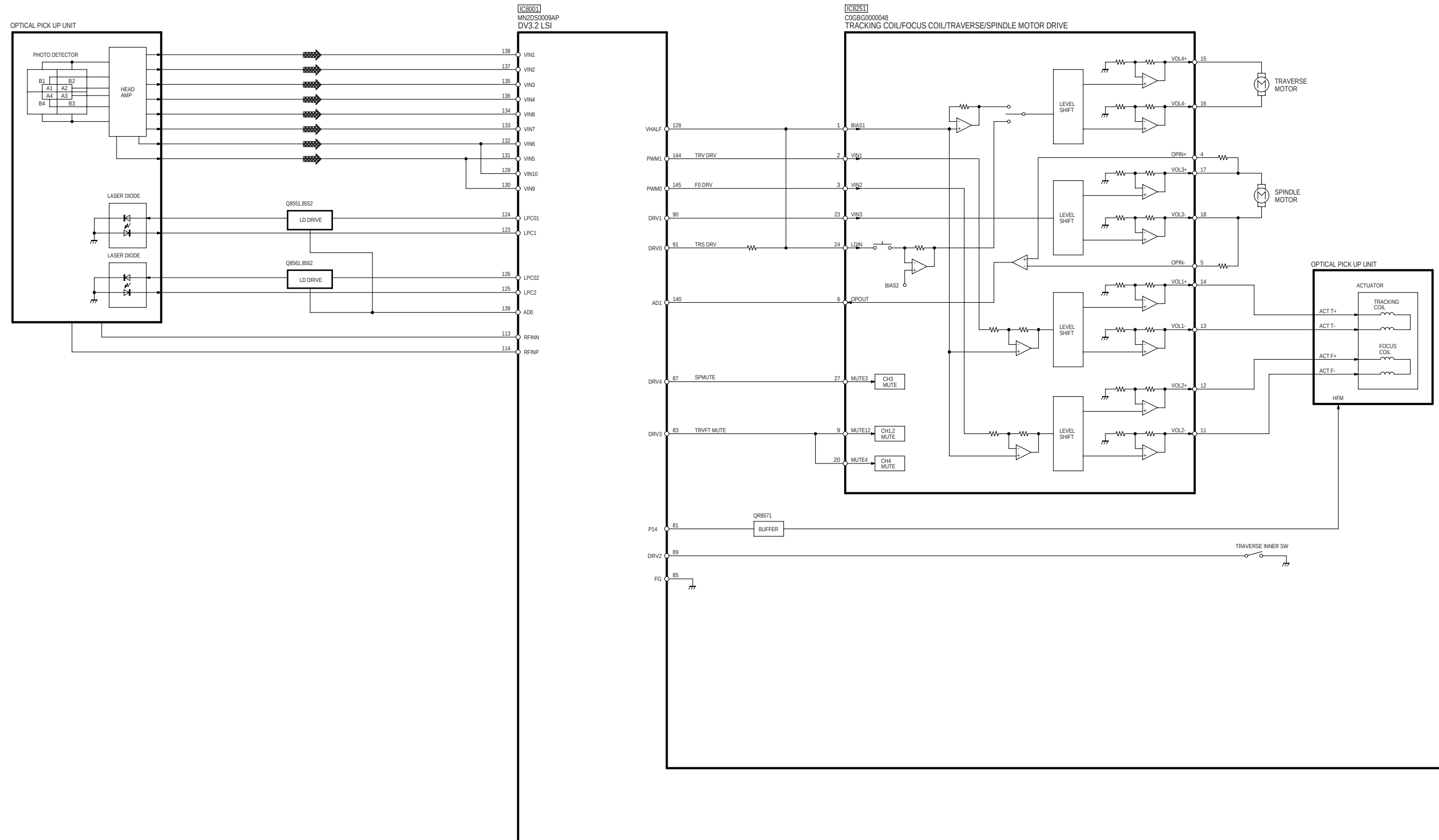
15 Illustration of IC's, Transistors and Diodes

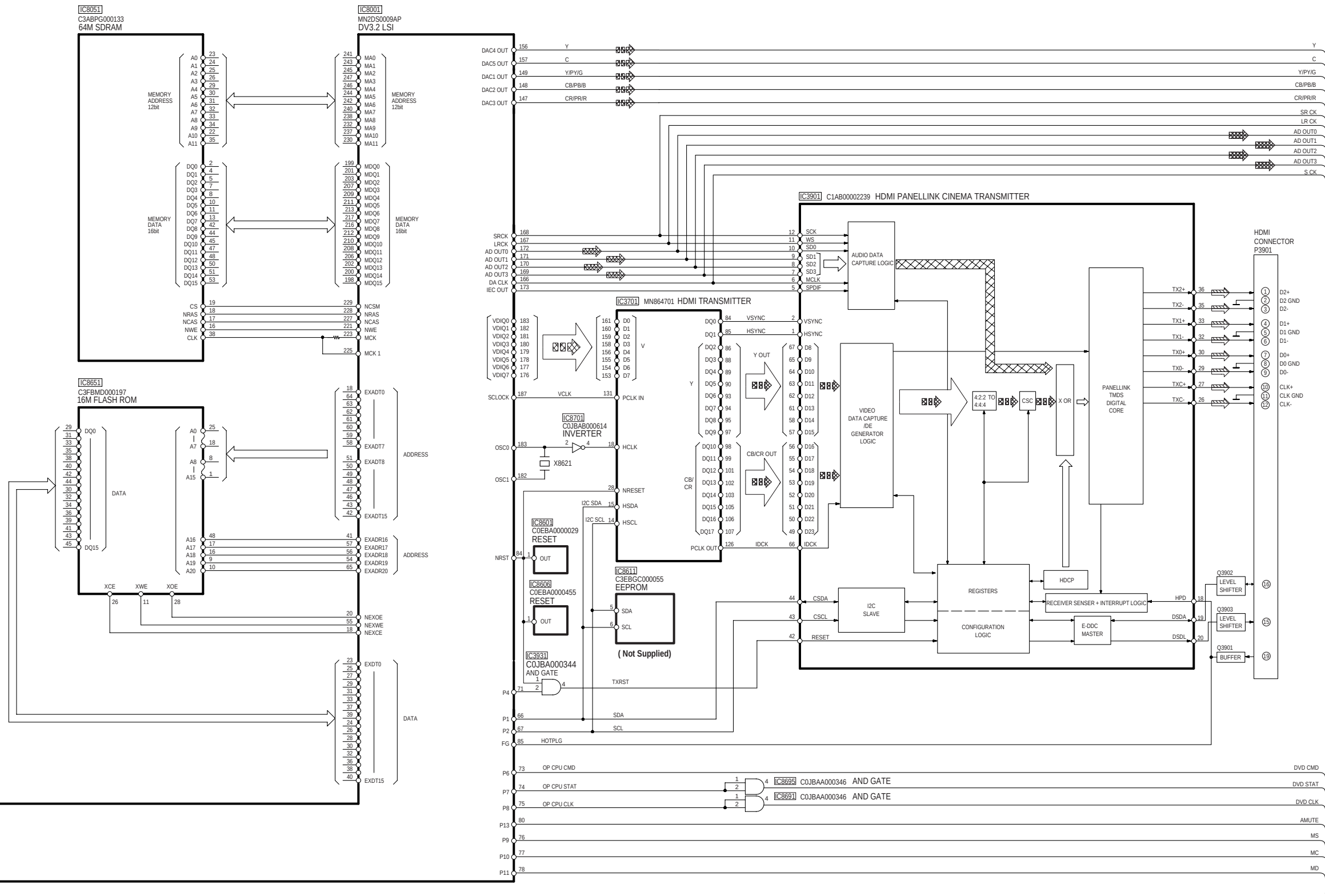
	C0ABBB000067 (8p) C0ABCB000088 (14p) C0ABBA000163 (10p) C0ABCB000052 (14p) C0CBCAD00082 (8p) C0DBZYY00018 (8p) C0EBA0000029 (4p) C0FBBK000050 (28p)	C0JBAB0000472 (14p) C0JBAR000326 (16p) C3ABPG000133 (54p) C3EBGC000055 (8p) C3EBEG000073 (8p) C9ZB00000461 (132p) XP0621400L (6p)		C0HBB0000057 (44p) C1AB00002239 (80p) C1BB00001098 (100p) MN101C49GHF (100p) MN2DS0009AP (256p) MN864701 (164p)	RFKWMHA0L160 
C0DABYY00002 C0AABB000125 	C0GAG0000007 	C0GBG0000048 	C0CBCDC00063 C0EBE0000455 C0JBAA000344 C0JBAA000346 C0JBAB000614 	B3PBA0000237 	RSN704D65-P 
C0DBEHG00006 	C0CBADE00023 C0CBADG00023 	C0DAAMH00012 C0DAZY000001 C0DAAMH00004 	C0CAADE00007 C0CAAYG00011 	B1GFGCAA0001 	B1BACG000048 
2SD1819A0L B1ABCF000011 B1ABCF000176 B1ADCF000001 B1ADGB000008 	B1ADBL000010 B1CFHA000002 B1GBCFL00037 B1GBCFJN0033 B1GDCFGA0018 B1GBCFJJ0051 B1GDCFJJ0047 UNR511V00L UNR521100L 	C0DABFC00002 	B1ACKD000005 B1AAKD000012 2SC3940ARA 	B1BACD000018 B1ABGC000001 B1BCCD000019 	B0HFRJ000012 
B0ADCJ000020 	MAZ82200ML 	B0ACCE000003 B0ECKM000016 B0ACCK000005 B0JCAE000001 	MA2J11100L 	B0BC01200019 B0BC01700015 B0BC02900004 B0BC035A0007 B0BC2R4A0006 B0BC3R400001 B0BC3R700004 B0BC4R0A0006 B0BC5R000009 	B0BC6R700006 B0BC7R500001 B0JCPD000025 
B0BC5R600003 	B0EAKM000117 B0EAMM000057 B0JAME000029 	MA2J72800L 	B0FBAR000018 	B3ABA0000397 B3AEA0000058 	B0HBSM000043 
B0ZAZ0000052 					

16 Wiring Connection Diagram



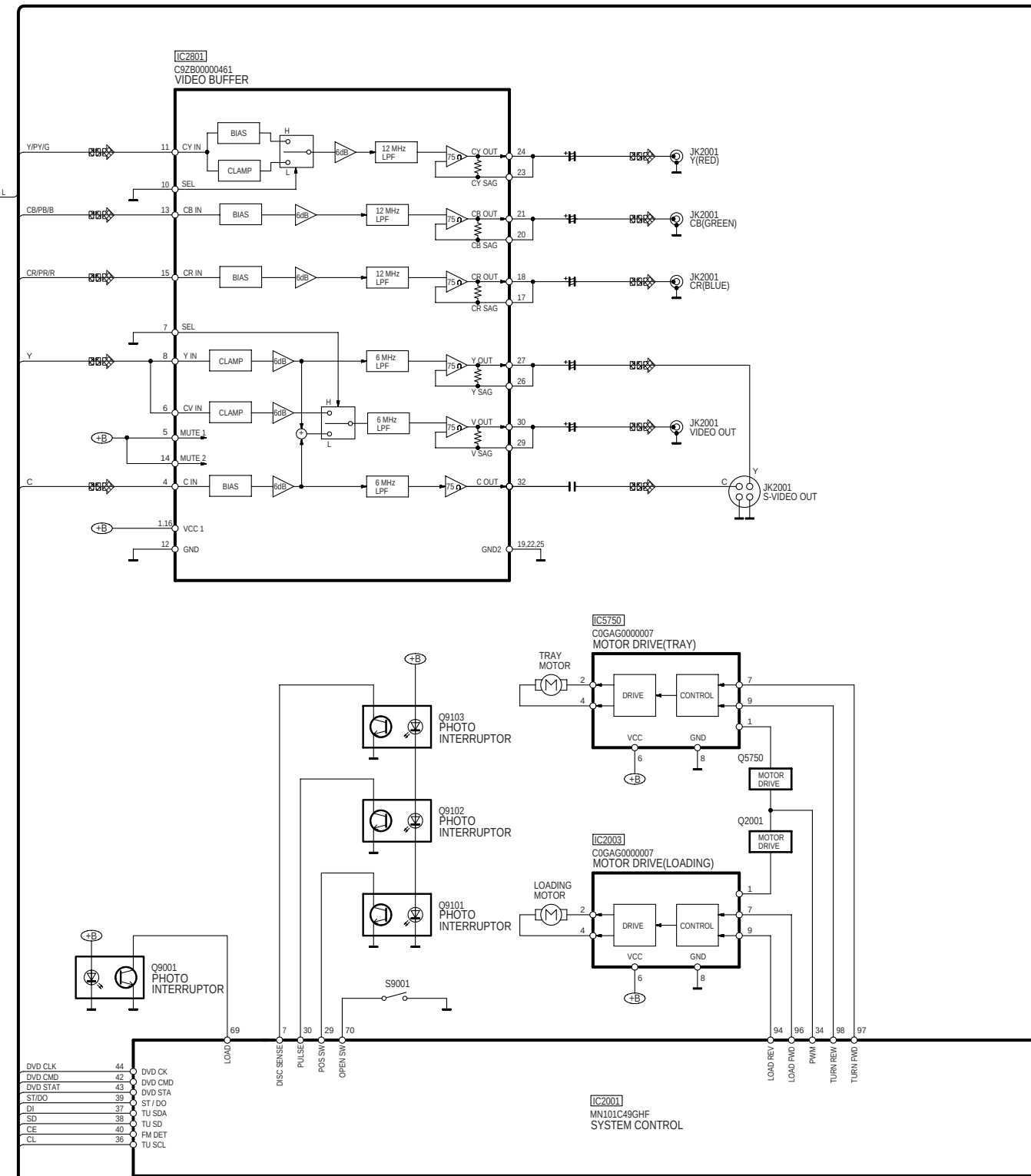
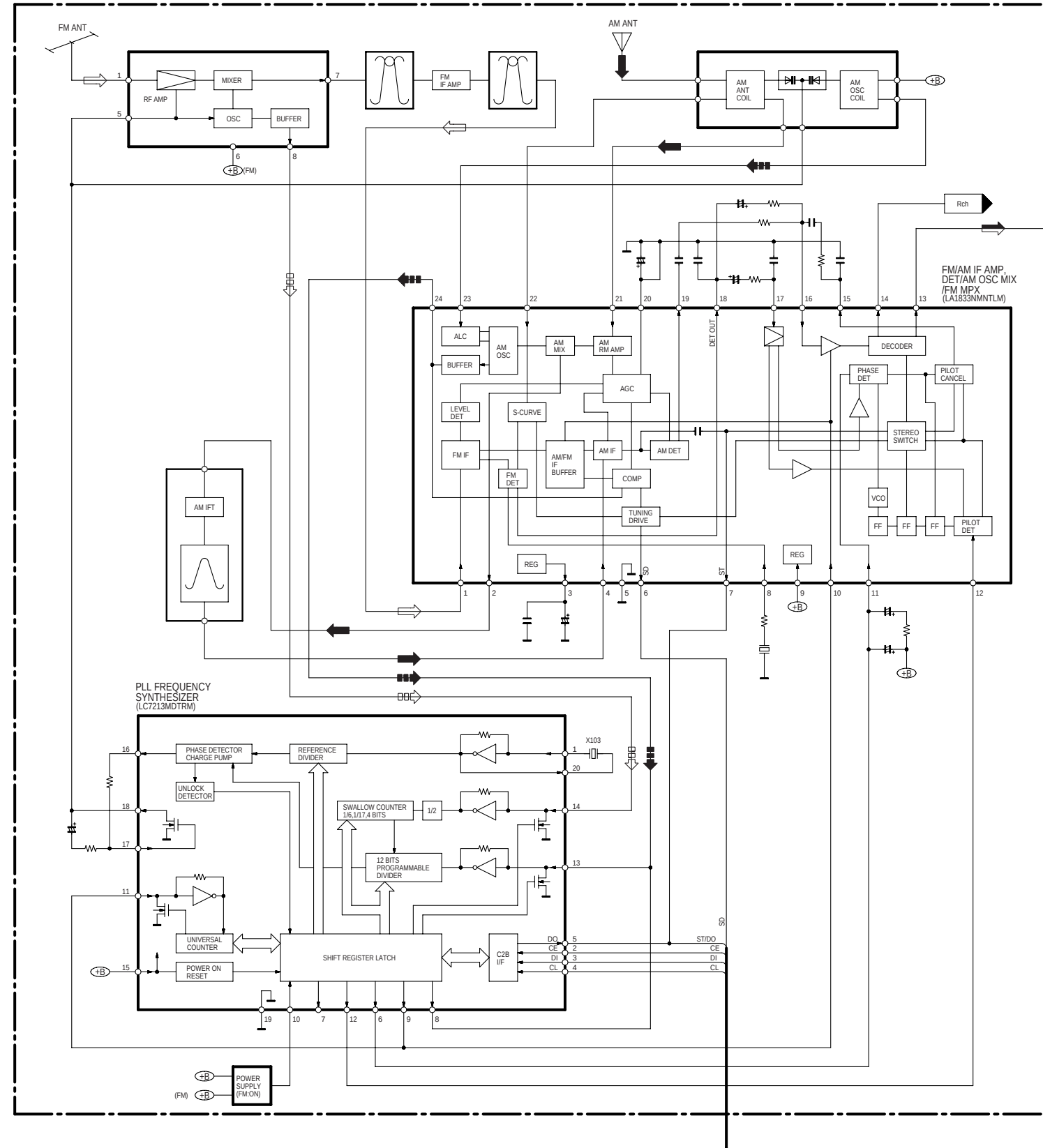
17 Block Diagram



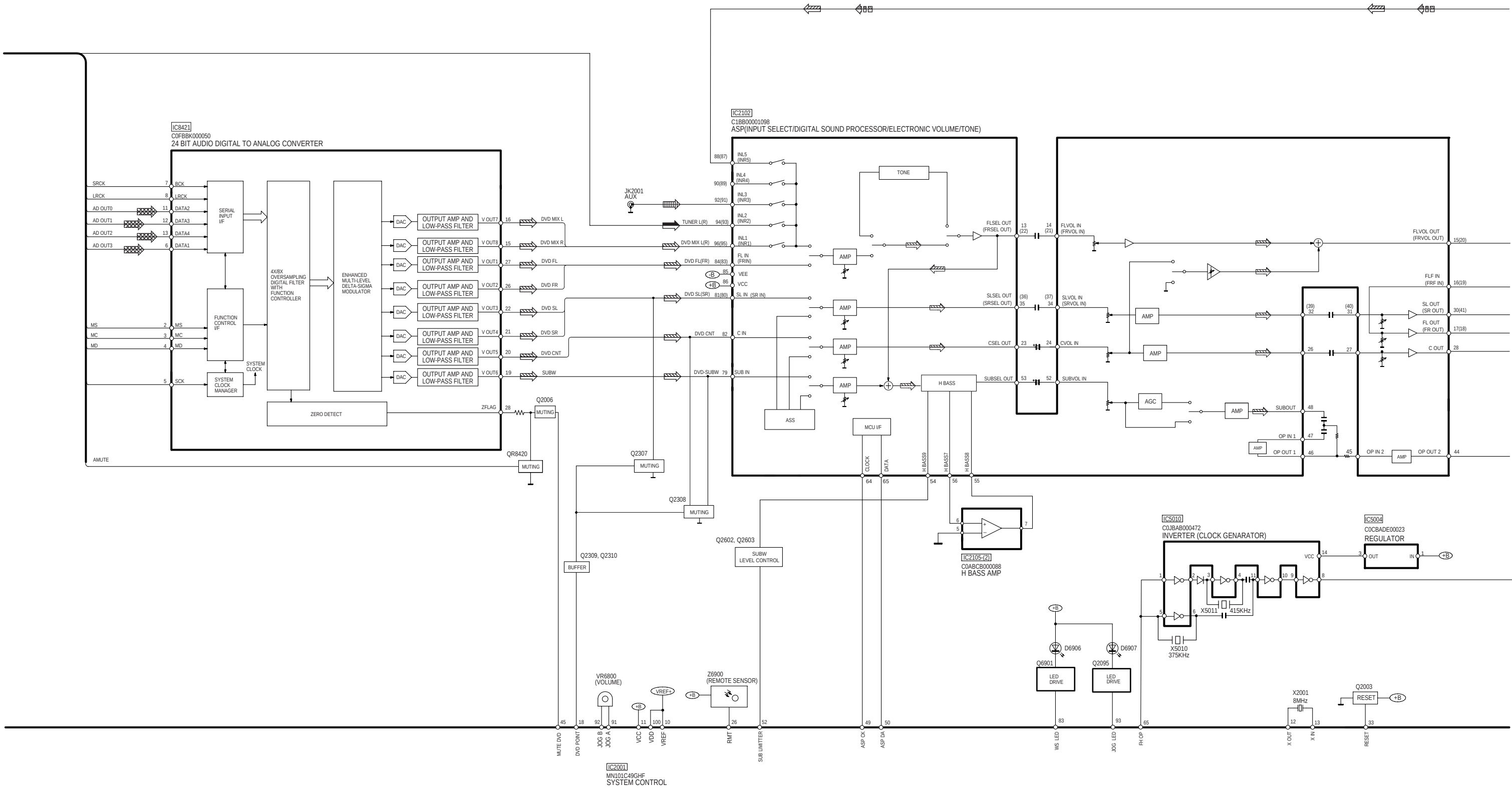


SA-HT740P/PC BLOCK DIAGRAM

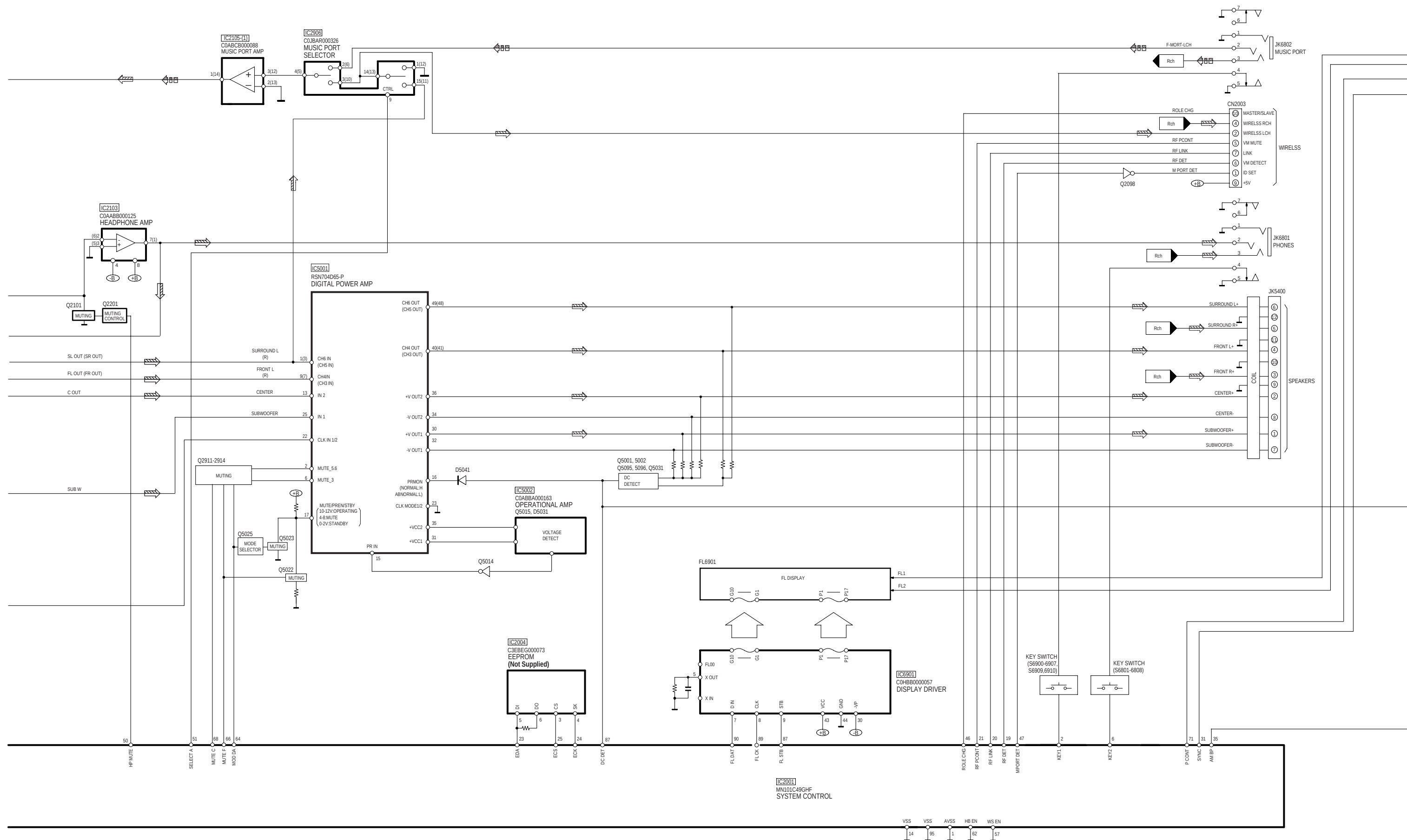
TUNER PACK



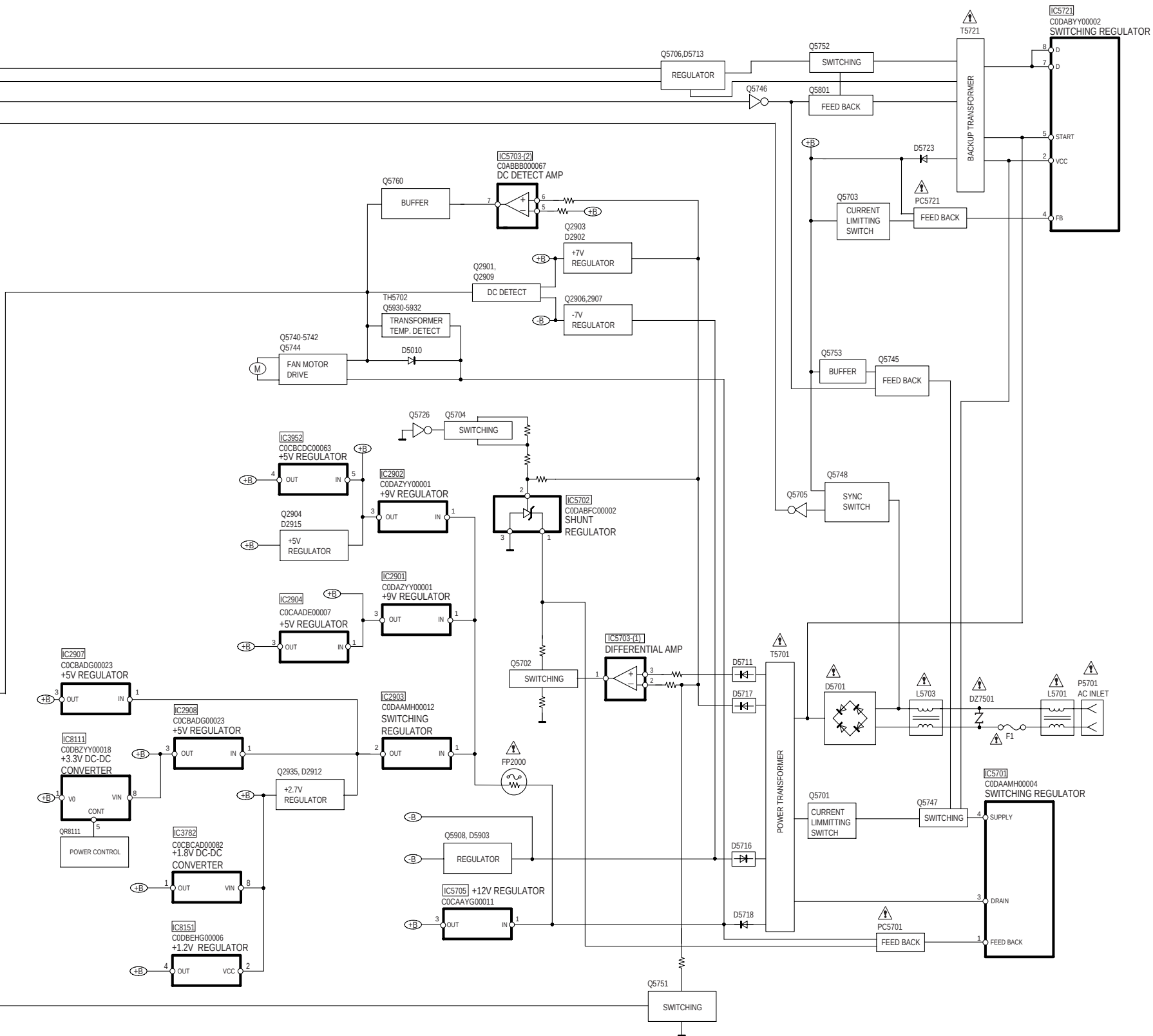
SA-HT740P/PC BLOCK DIAGRAM



SA-HT740P/PC BLOCK DIAGRAM



SA-HT740P/PC BLOCK DIAGRAM



SIGNAL LINES

	: MAIN SIGNAL LINE		: AM SIGNAL LINE		: DVD AUDIO SIGNAL LINE
	: FM SIGNAL LINE		: AM OSC SIGNAL LINE		: DVD VIDEO SIGNAL LINE
	: FM OSC SIGNAL LINE		: FM /AM SIGNAL LINE		: CD-DA (AUDIO /VIDEO) SIGNAL LINE
	: AUX SIGNAL LINE		: MUSIC PORT SIGNAL LINE		

() Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

18 Schematic Diagram

· This schematic diagram may be modified at any time with the development of new technology.

Notes:

- S6801:

S6802:

S6803:

S6804:

S6808:

S6806:

S6805:

S6900:

S6907:

S6902-S6906:

S6901:

VR6800:
- Play and memory switch (▶ Memory).

R. skip, search and Tuning switch (◀◀ / ◀◀ / TUNING ∨).

F. skip, search and Tuning switch (▶▶ / ▶▶ / TUNING ∧).

Stop and TUNE mode switch (■ TUNE MODE). /

Pause and FM mode switch (■■ FM MODE).

Tray open / close switch (▲ Open / Close).

Disc skip switch (DISC SKIP).

Disc exchange switch (DISC EXCHANGE).

Standby / on switch (POWER ⏻ / ⏻).

Source select switch (SELECTOR).

Disc switch (DISC1-DISC5).

CD mode switch [PARTY MODE].

Volume control.

· Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

· Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer’s specified parts shown in the parts list.

· The supply part number is described alone in the replacement parts list.

· Voltage and signal line

- ⊗→

▨→

⊗⊗→

⊗⊗→

→

■ → ■
- : +B Signal line

: CD-DA signal line

: Main signal line

: DVD (Video) signal line

: DVD (Audio) signal line

: FM/AM signal line

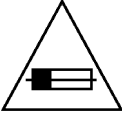
: -B Signal line

Caution!

- IC and LSI are sensitive to static electricity.
- Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

CAUTION:

FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD,
REPLACE ONLY WITH SAME
TYPE F1 8.0A 125V FUSE



RISK OF FIRE-REPLACE FUSE AS MARKED.

FUSE CAUTION



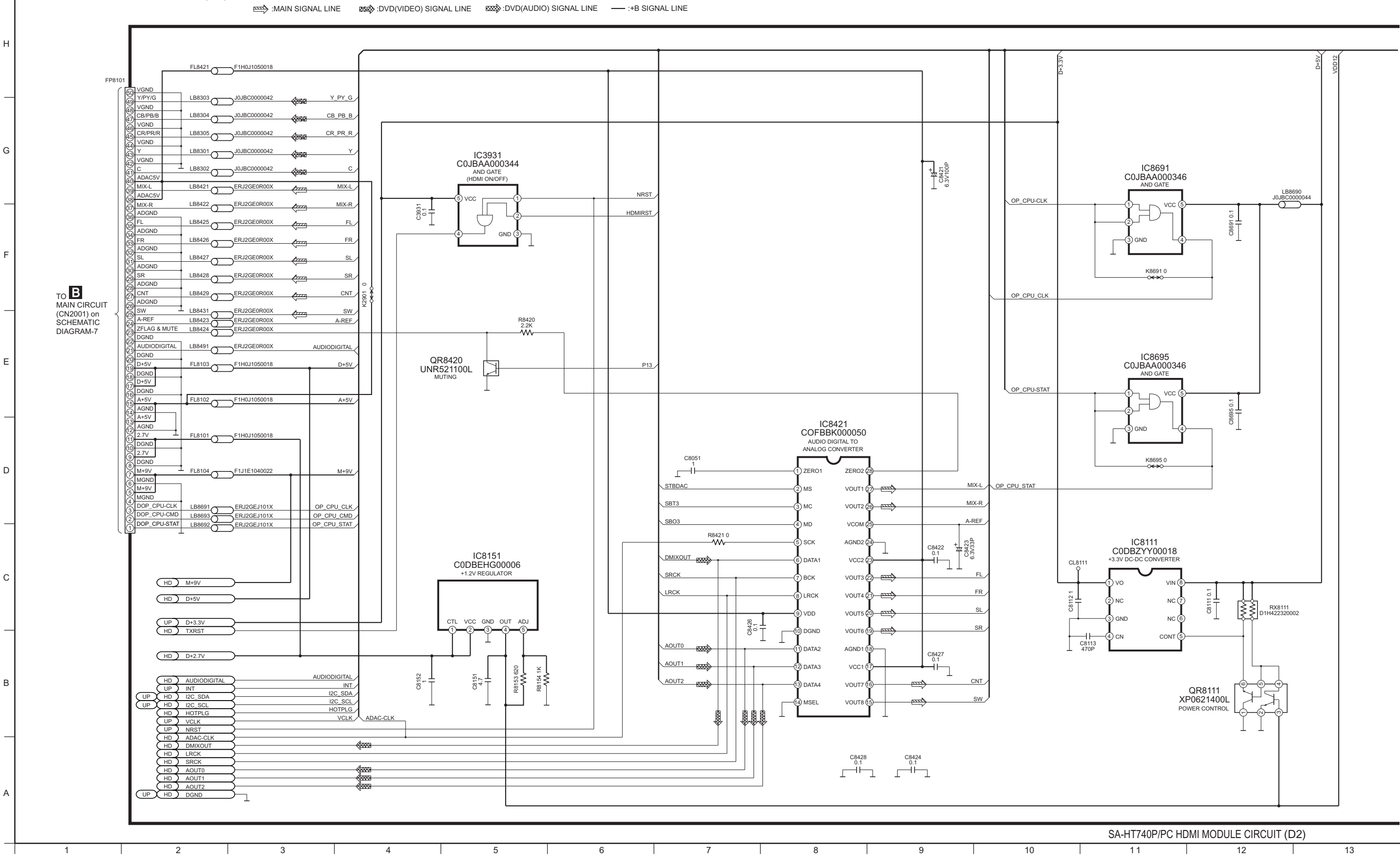
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire harzard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.



Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là qù le présent symbole est apposé.

SCHEMATIC DIAGRAM-1

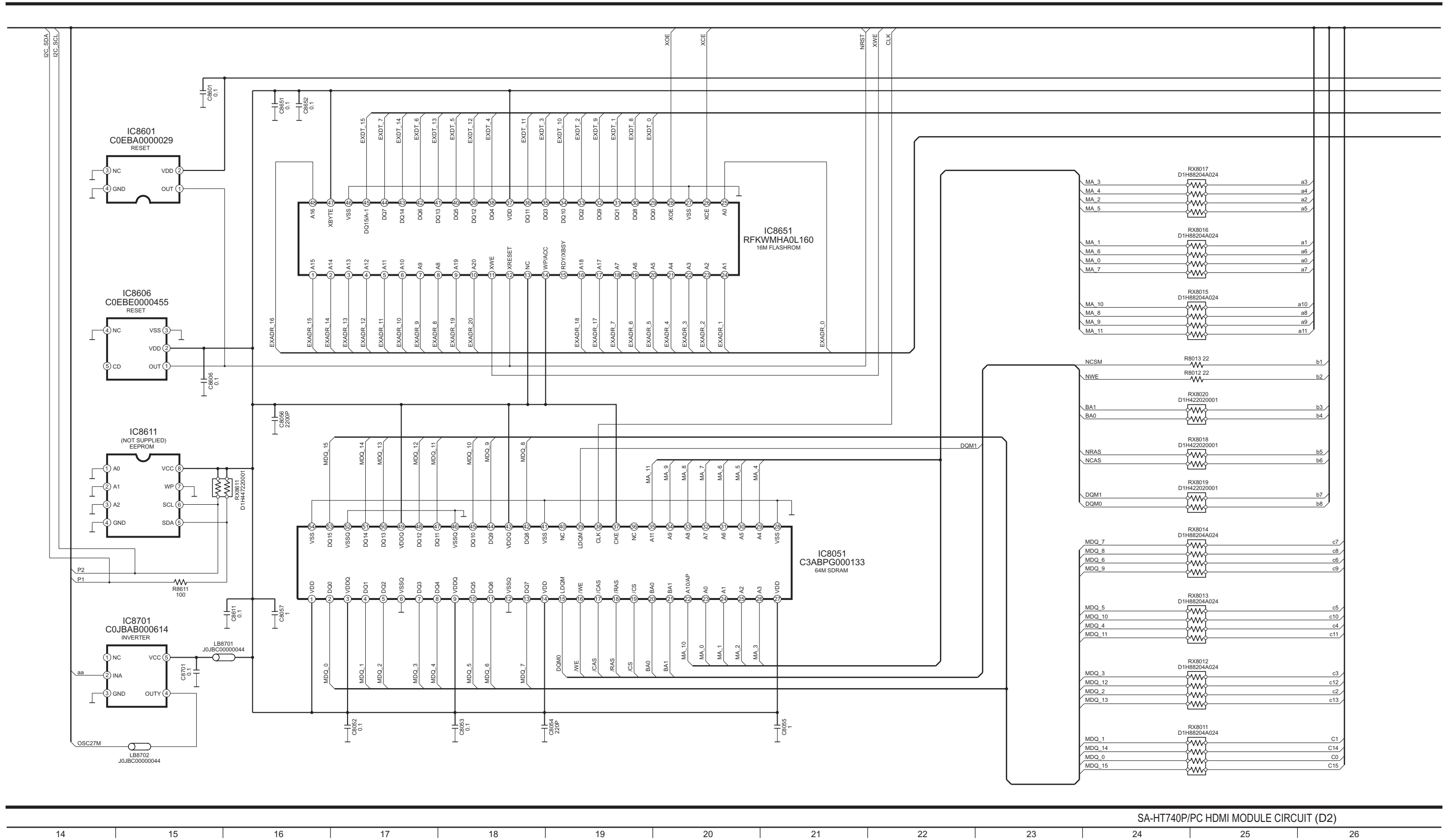
A HDMI MODULE CIRCUIT (D2)



SCHEMATIC DIAGRAM-2

A HDMI MODULE CIRCUIT (D2)

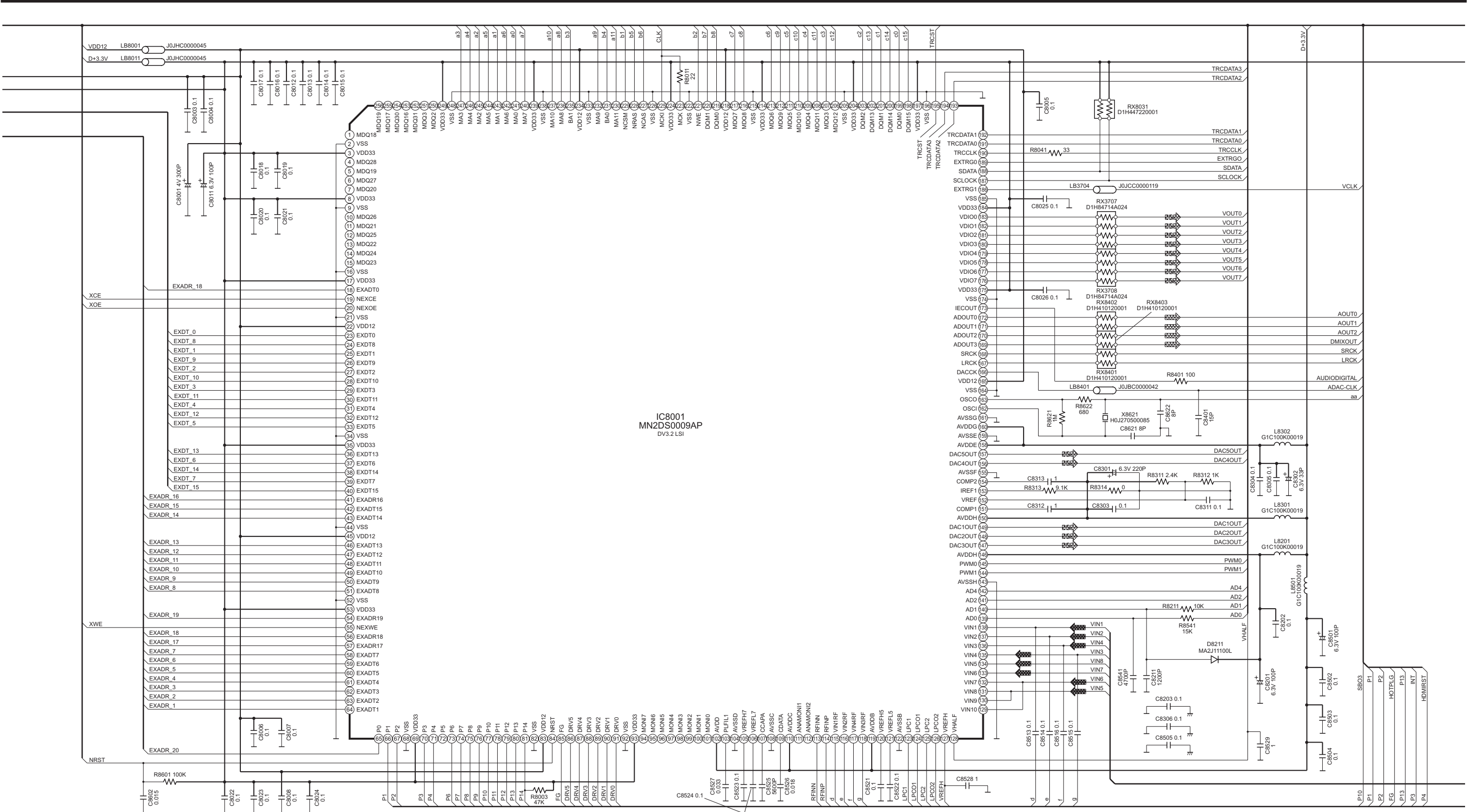
— :+B SIGNAL LINE



SCHEMATIC DIAGRAM-3

A HDMI MODULE CIRCUIT (D2)

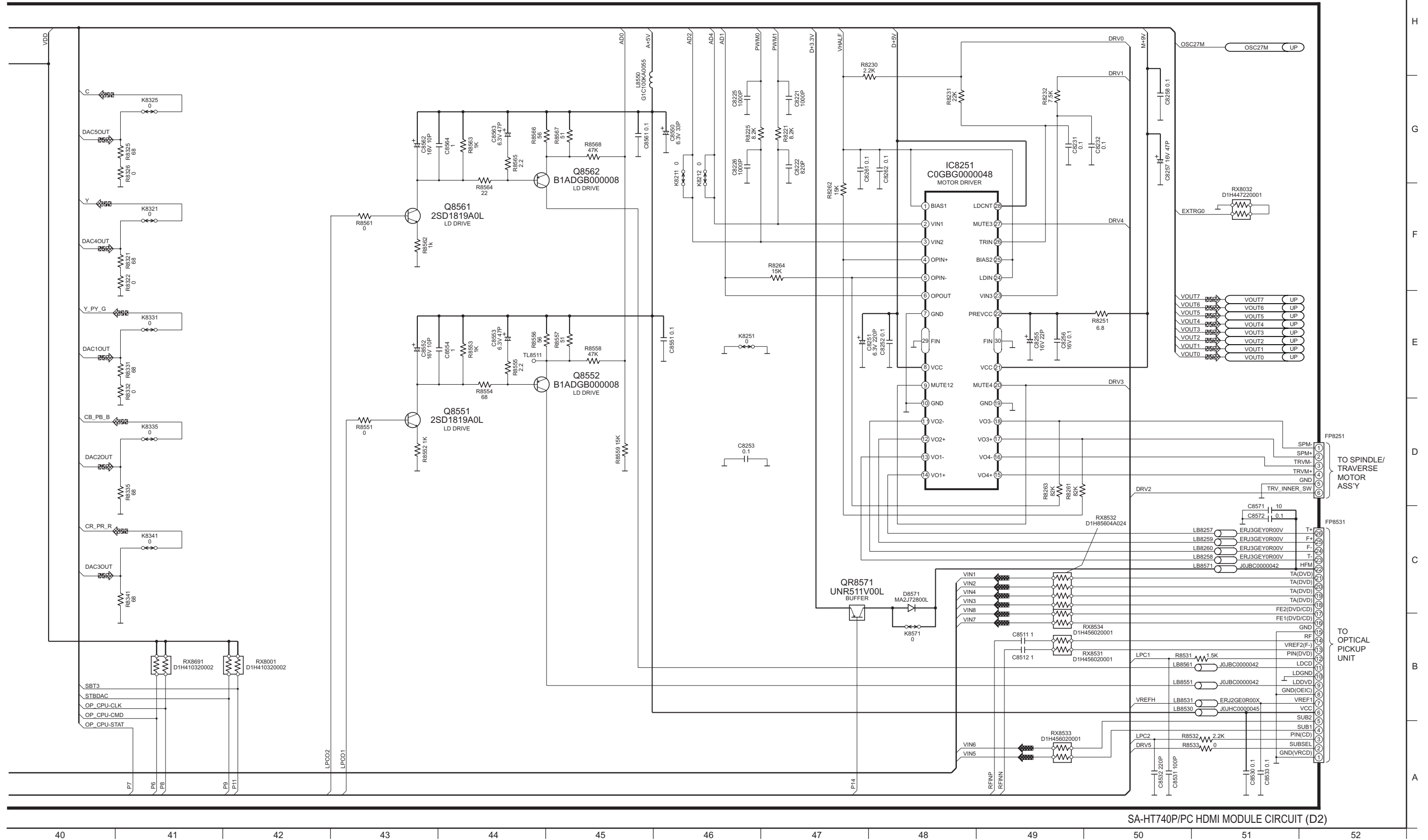
 :CD-DA SIGNAL LINE  :DVD(VIDEO) SIGNAL LINE  :DVD(AUDIO) SIGNAL LINE — :+B SIGNAL LINE



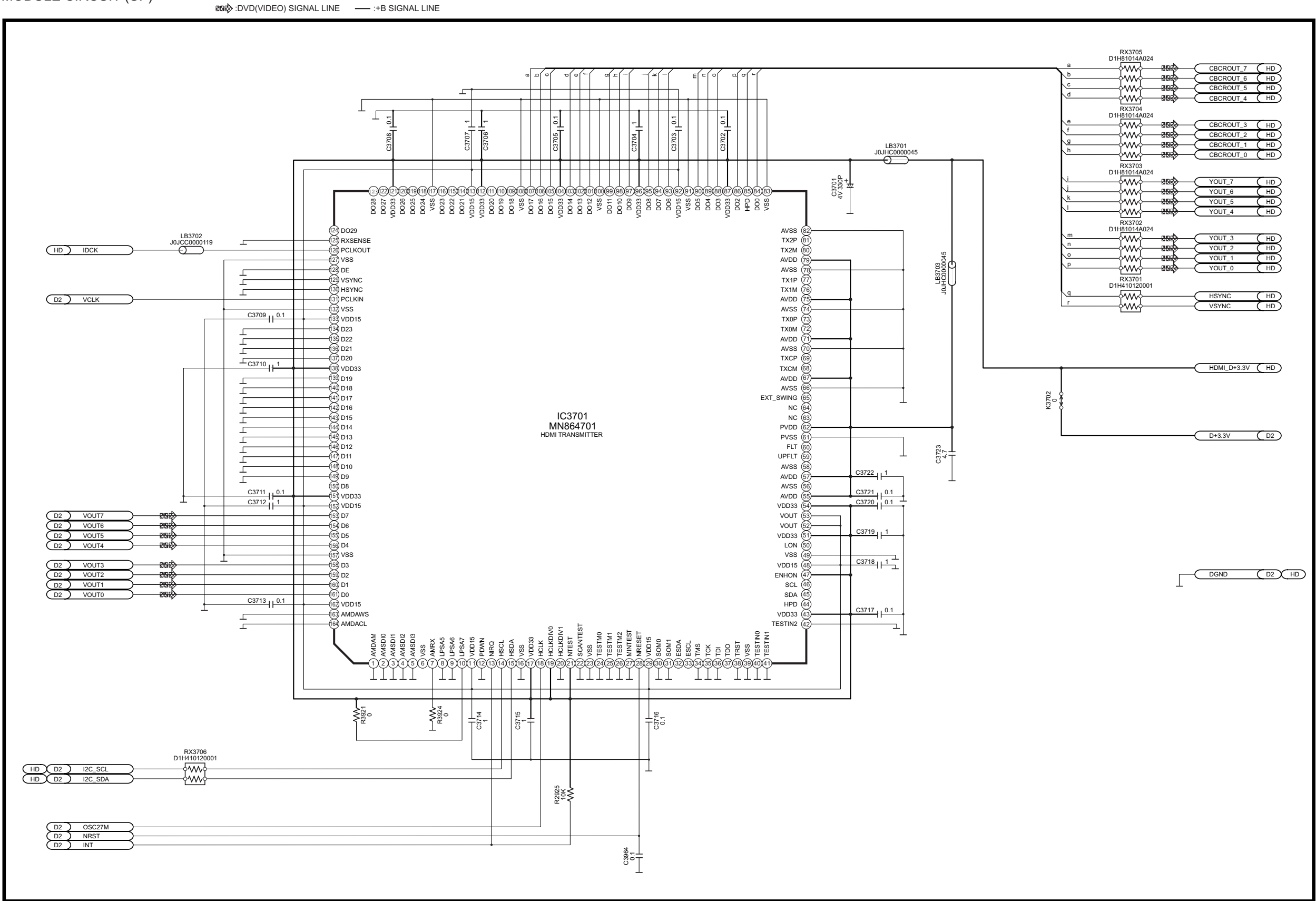
SCHEMATIC DIAGRAM-4

A HDMI MODULE CIRCUIT (D2)

 :CD-DA SIGNAL LINE
 :DVD(VIDEO) SIGNAL LINE
 — :+B SIGNAL LINE



A HDMI MODULE CIRCUIT (UP)

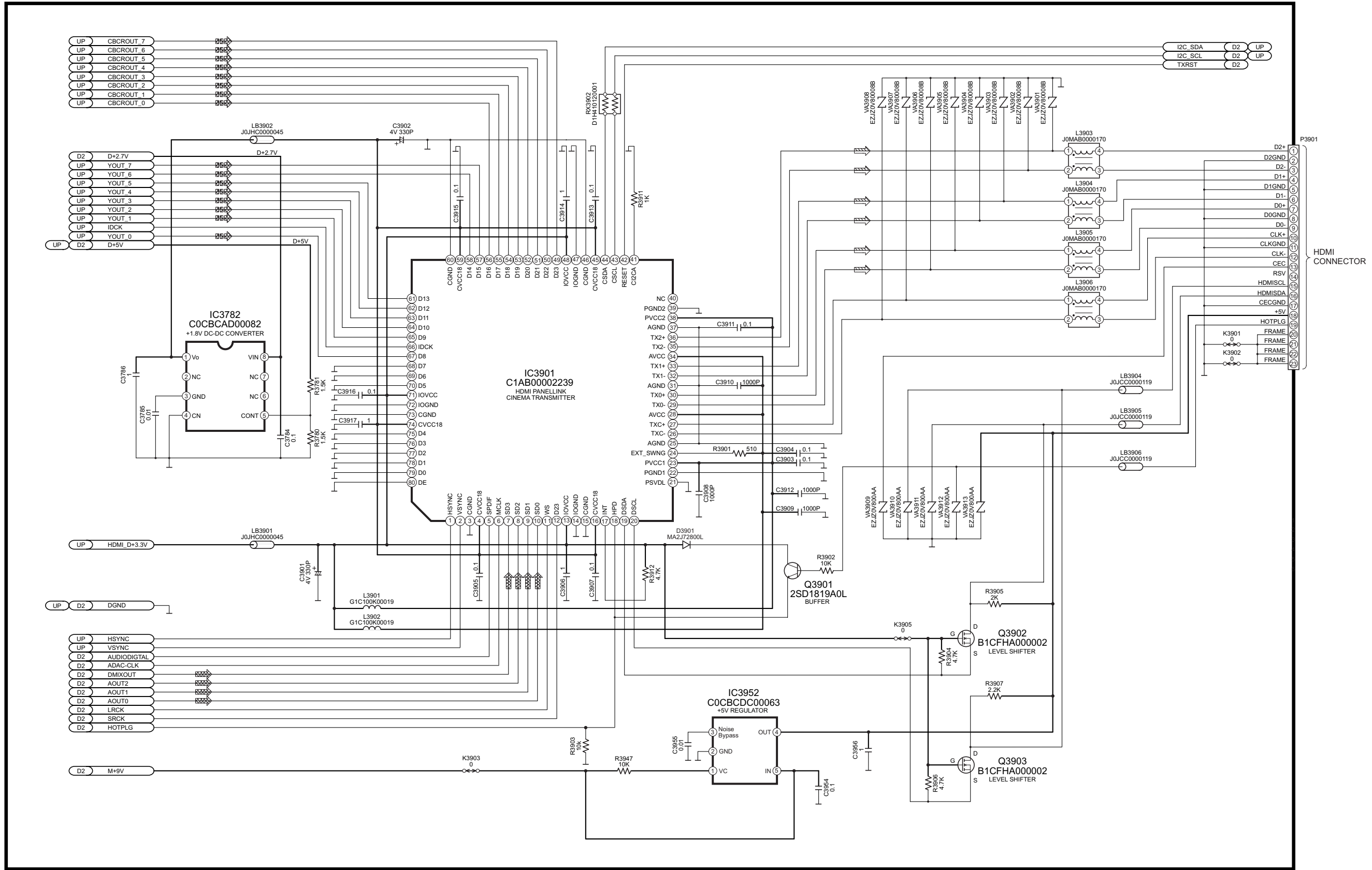


SA-HT740P/PC HDMI MODULE CIRCUIT (UP)

SCHEMATIC DIAGRAM-6

A HDMI MODULE CIRCUIT (HD)

 :DVD(VIDEO) SIGNAL LINE  :DVD(AUDIO) SIGNAL LINE  :MAIN SIGNAL LINE



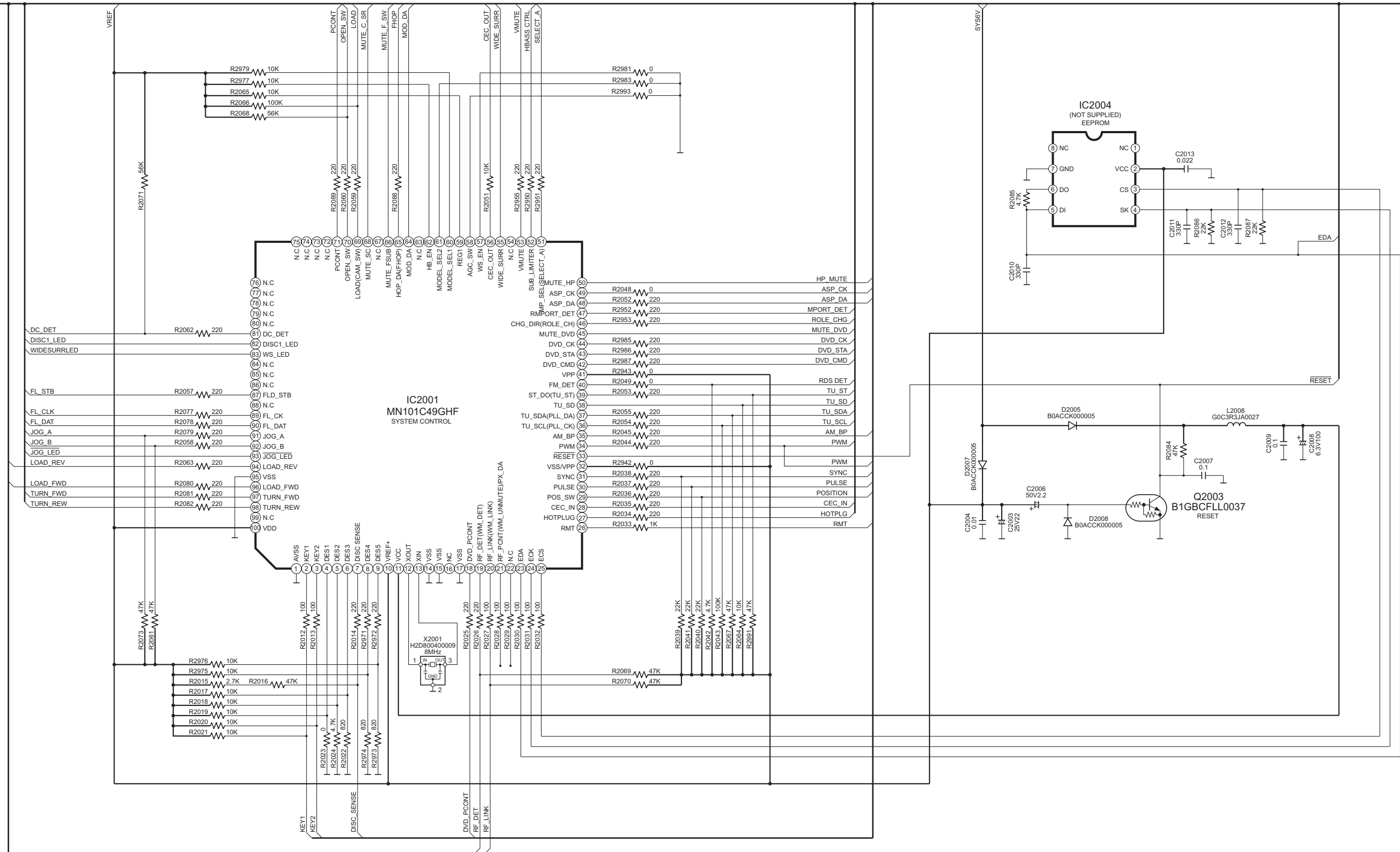
SA-HT740P/PC HDMI MODULE CIRCUIT

B MAIN CIRCUIT



SCHEMATIC DIAGRAM-8

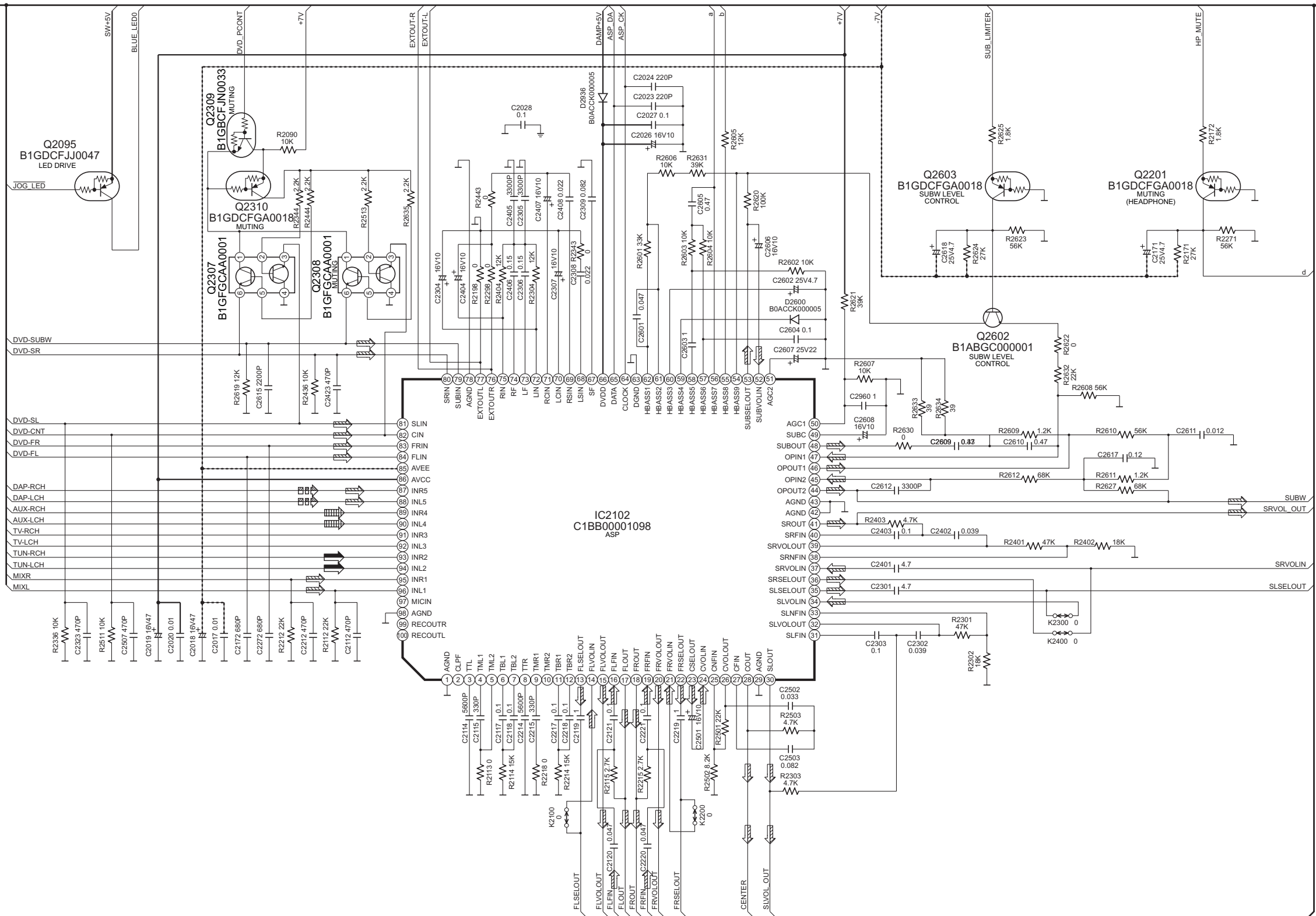
B MAIN CIRCUIT



SCHEMATIC DIAGRAM-9

B MAIN CIRCUIT

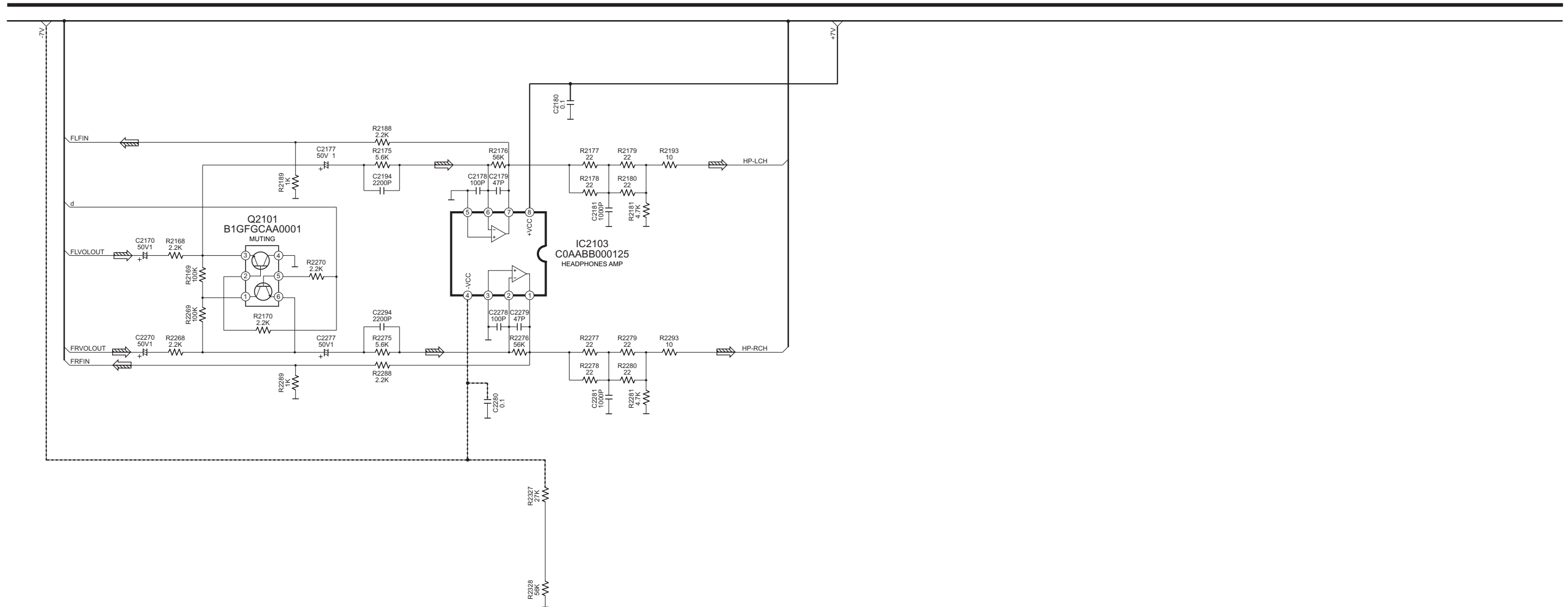
 : AUX SIGNAL LINE
 : MUSIC PORT SIGNAL LINE
 : MAIN SIGNAL LINE
 : +B SIGNAL LINE
 : -B SIGNAL LINE



SCHEMATIC DIAGRAM-10

B MAIN CIRCUIT

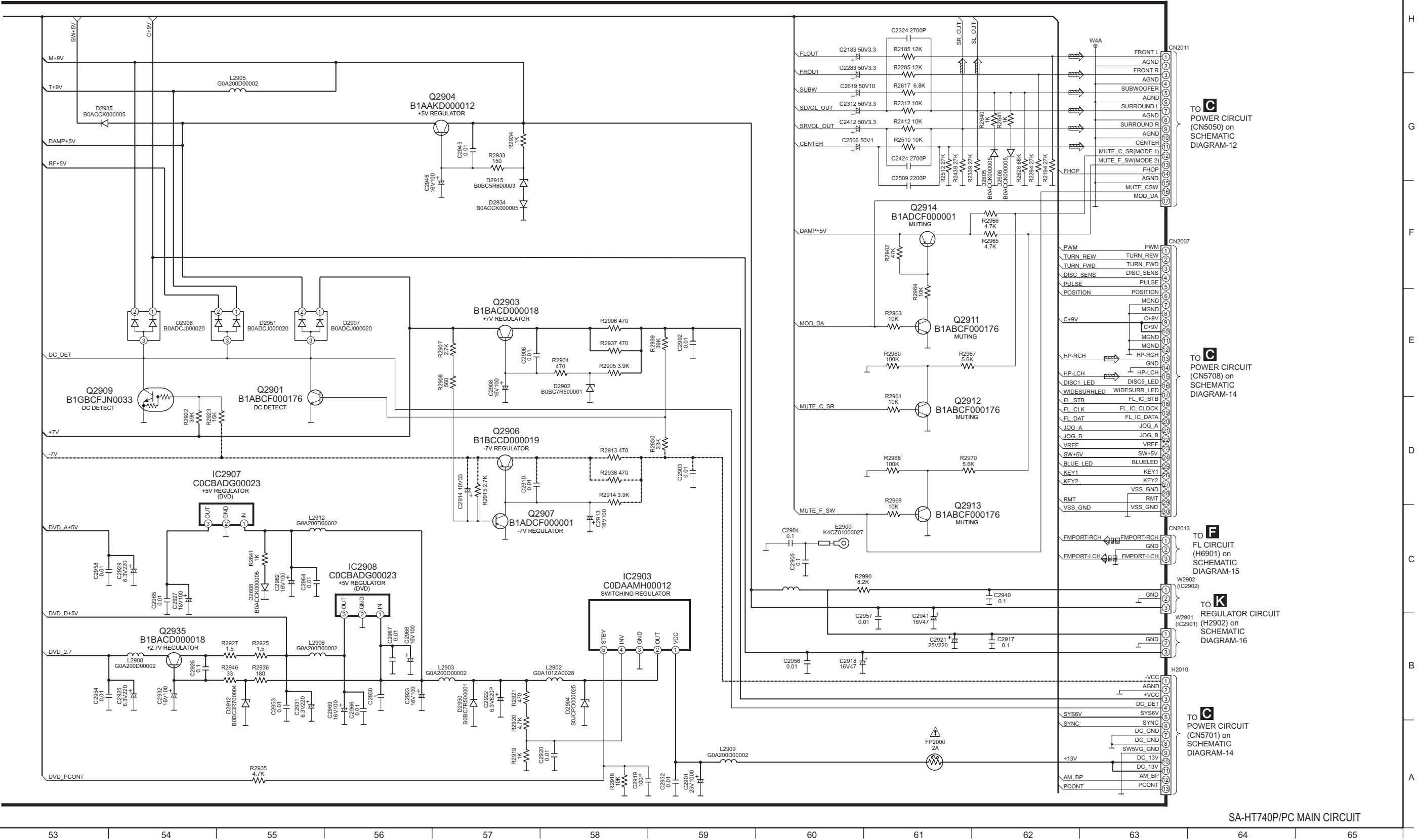
⇒ :MAIN SIGNAL LINE — :+B SIGNAL LINE --- :-B SIGNAL LINE



SCHEMATIC DIAGRAM-11

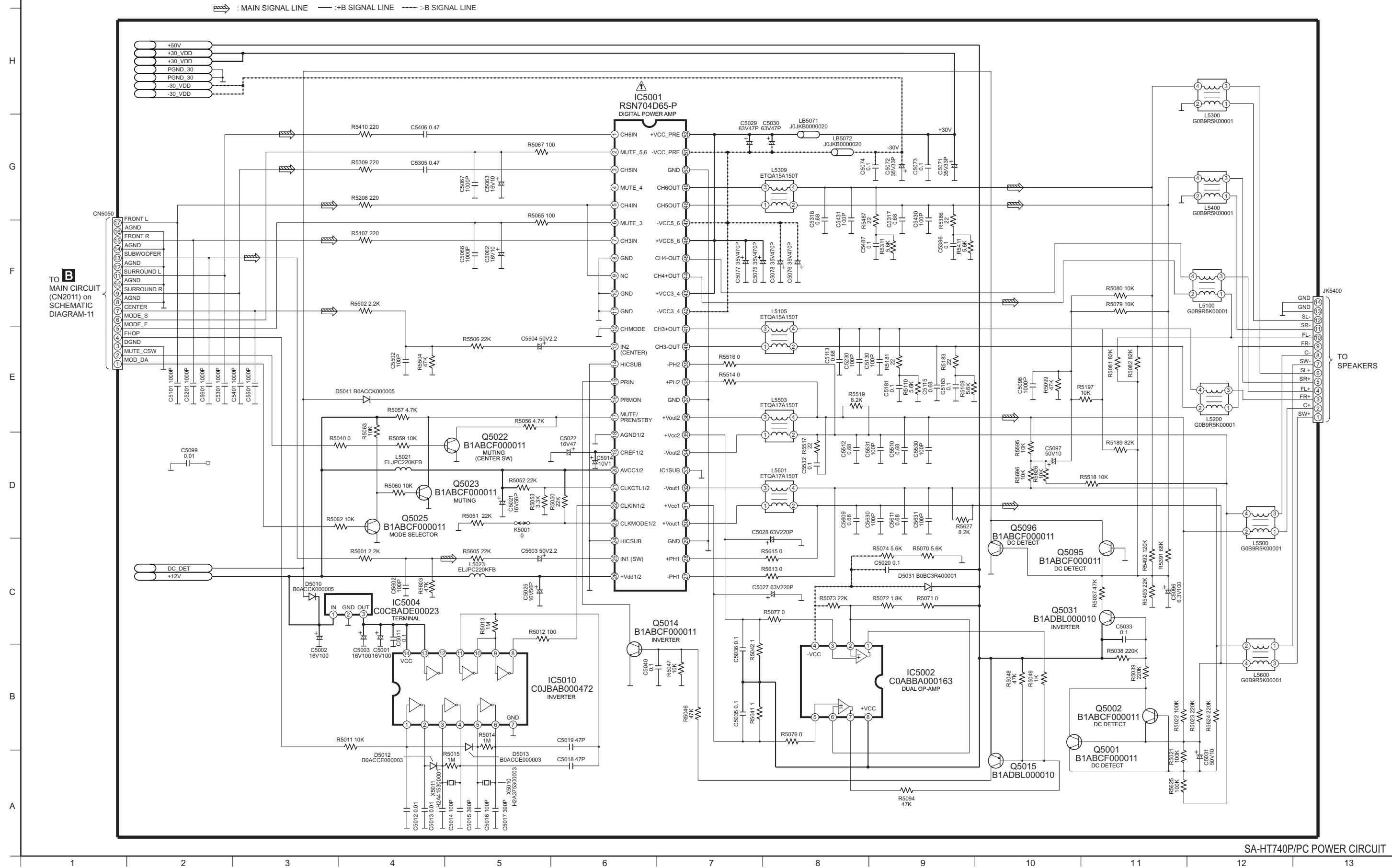
B MAIN CIRCUIT

⇒ :MAIN SIGNAL LINE  : MUSIC PORT SIGNAL LINE — :+B SIGNAL LINE - - - - : -B SIGNAL LINE



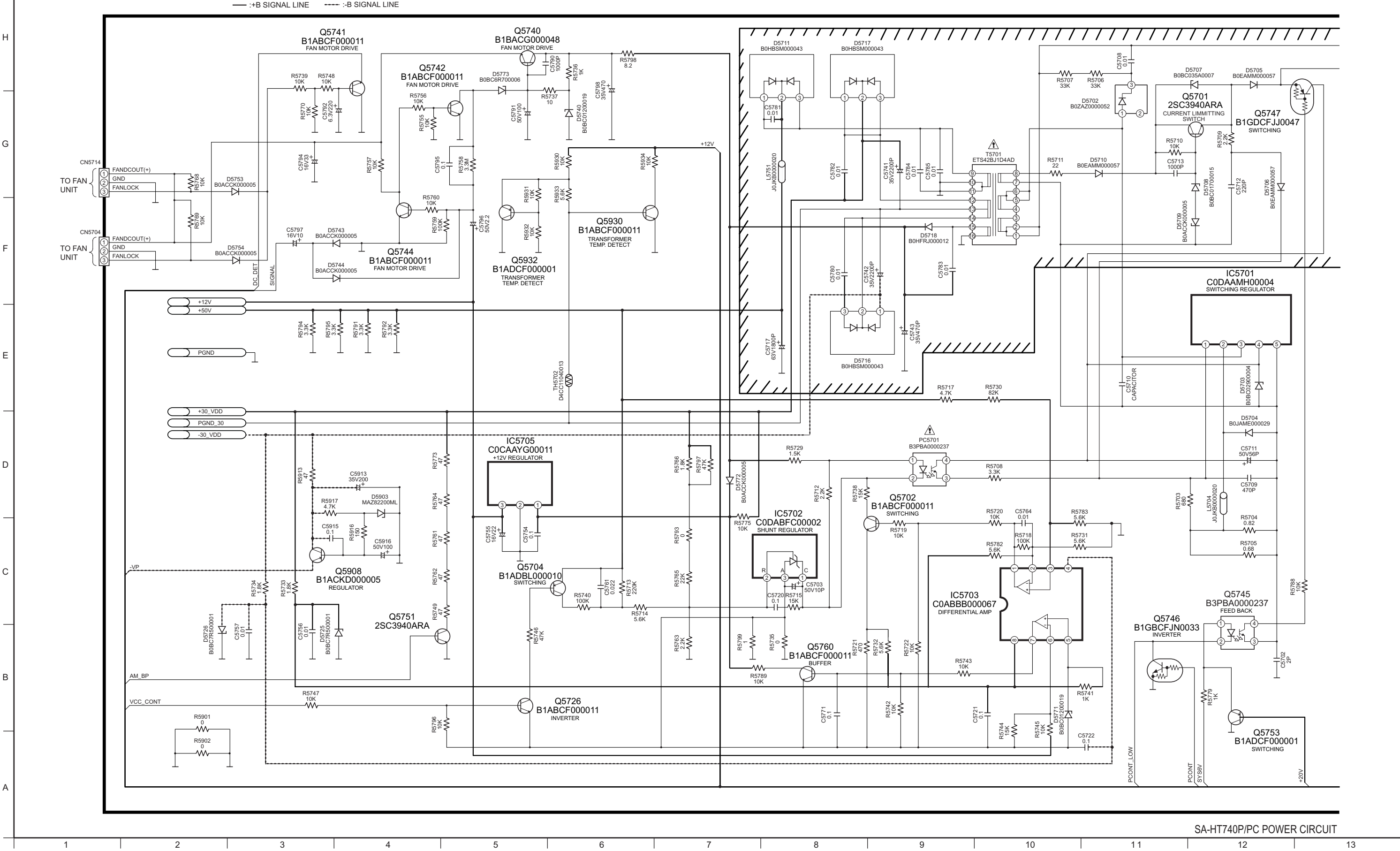
SCHEMATIC DIAGRAM-12

C POWER CIRCUIT

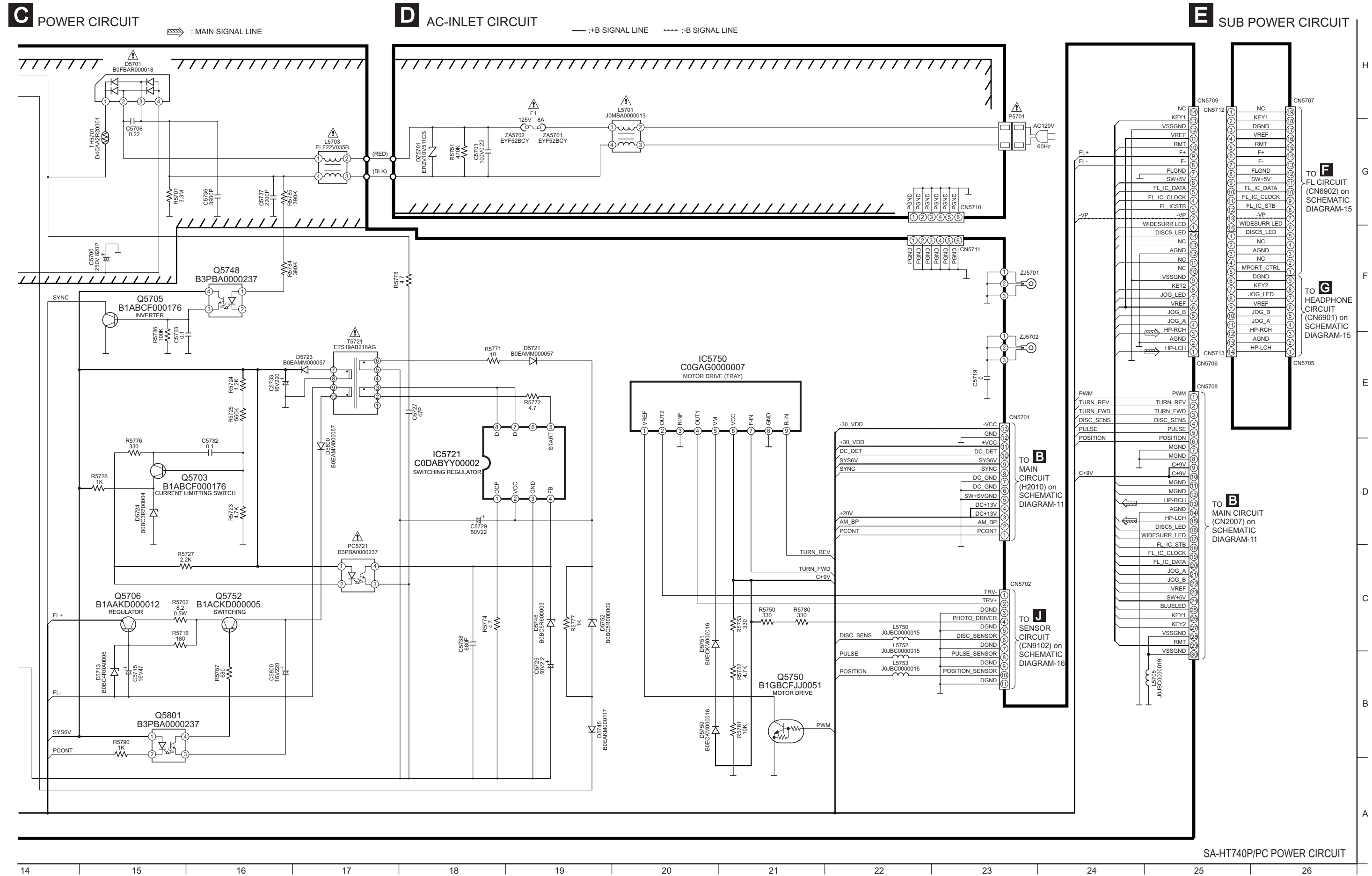


SCHEMATIC DIAGRAM-13

C POWER CIRCUIT



SCHEMATIC DIAGRAM-14



F FL CIRCUIT

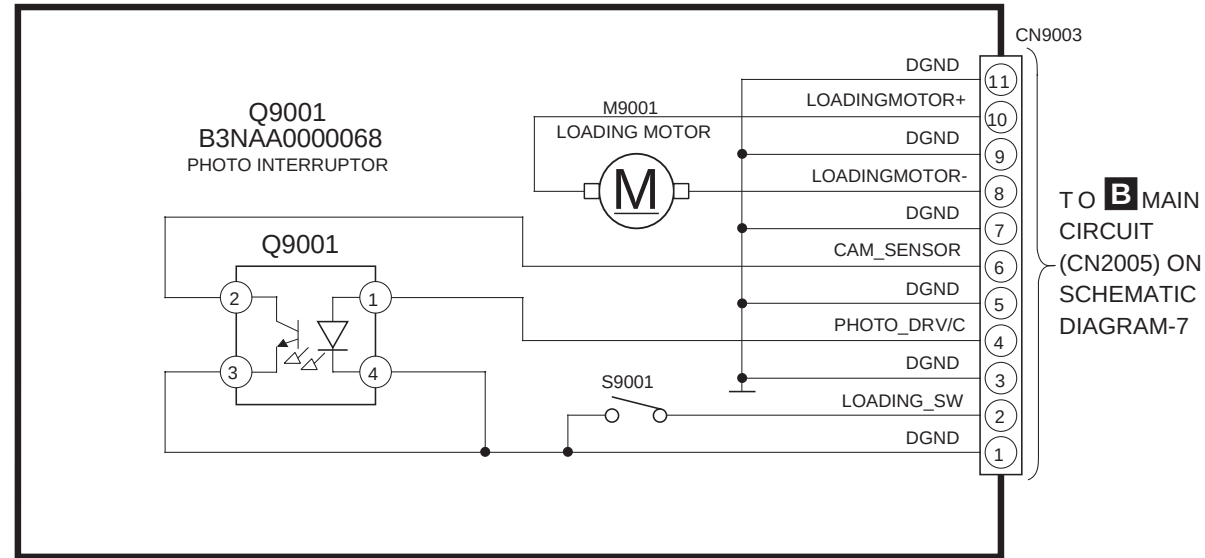


18.5. (D) Loading Motor, Tray Motor, Sensor & Regulator Circuit

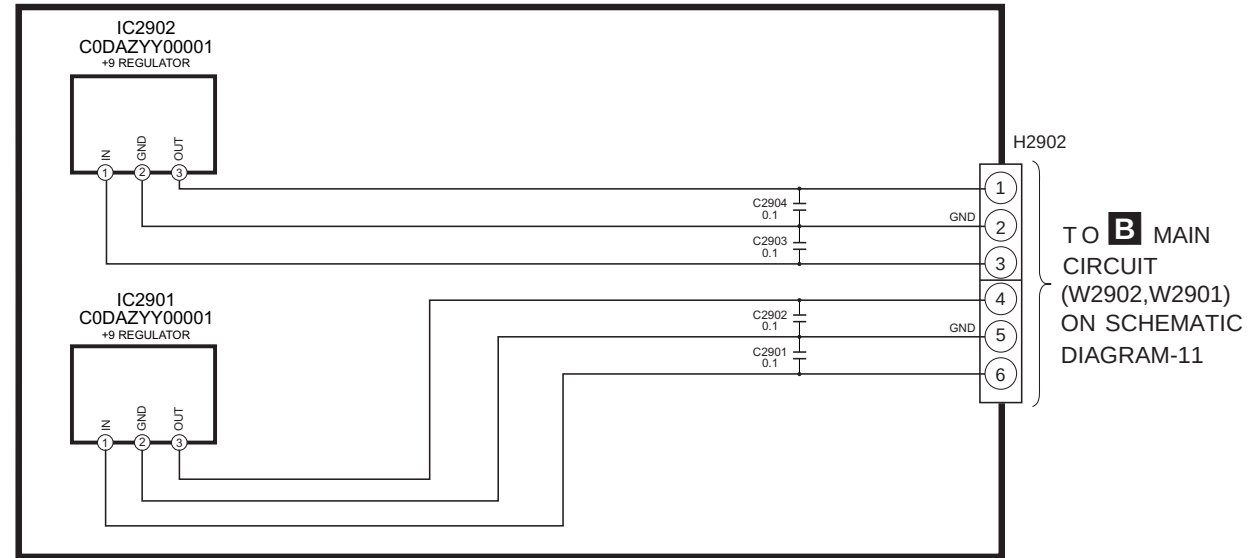
SCHEMATIC DIAGRAM-16

H

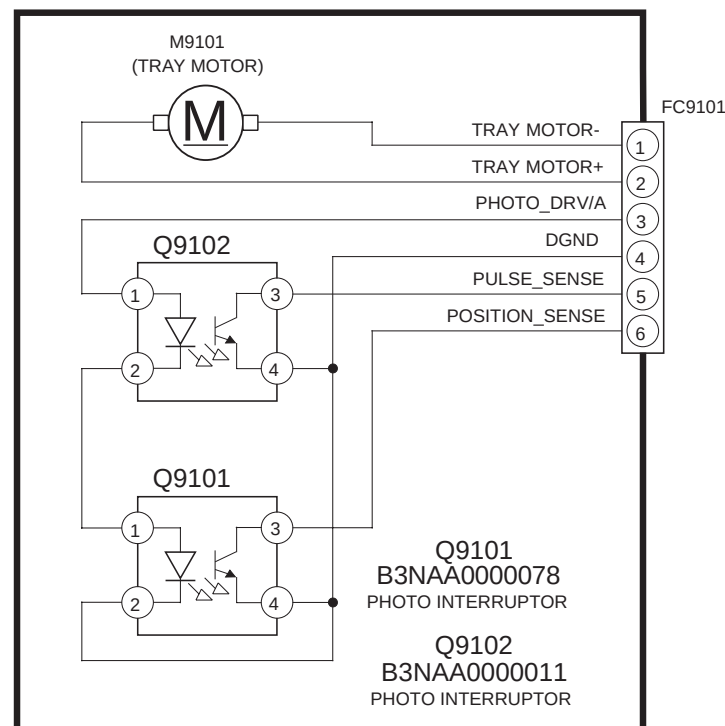
LOADING MOTOR CIRCUIT

**K**

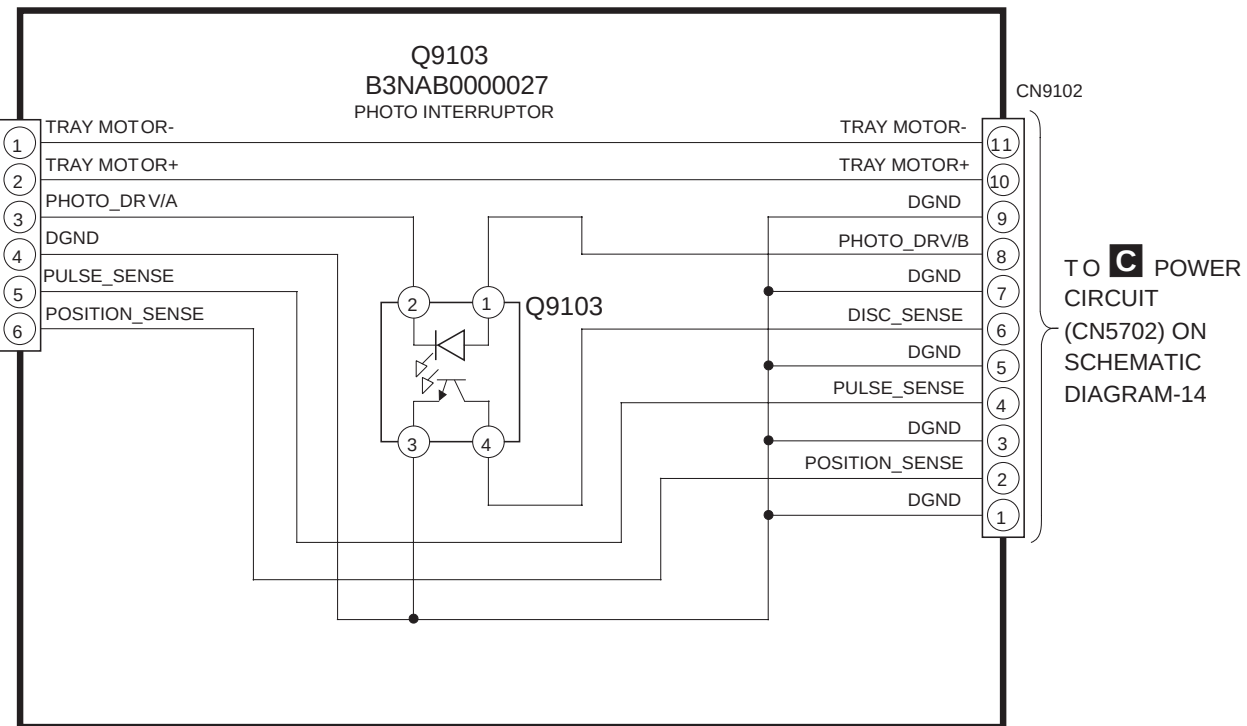
REGULATOR CIRCUIT

**I**

TRAY MOTOR CIRCUIT

**J**

SENSOR CIRCUIT

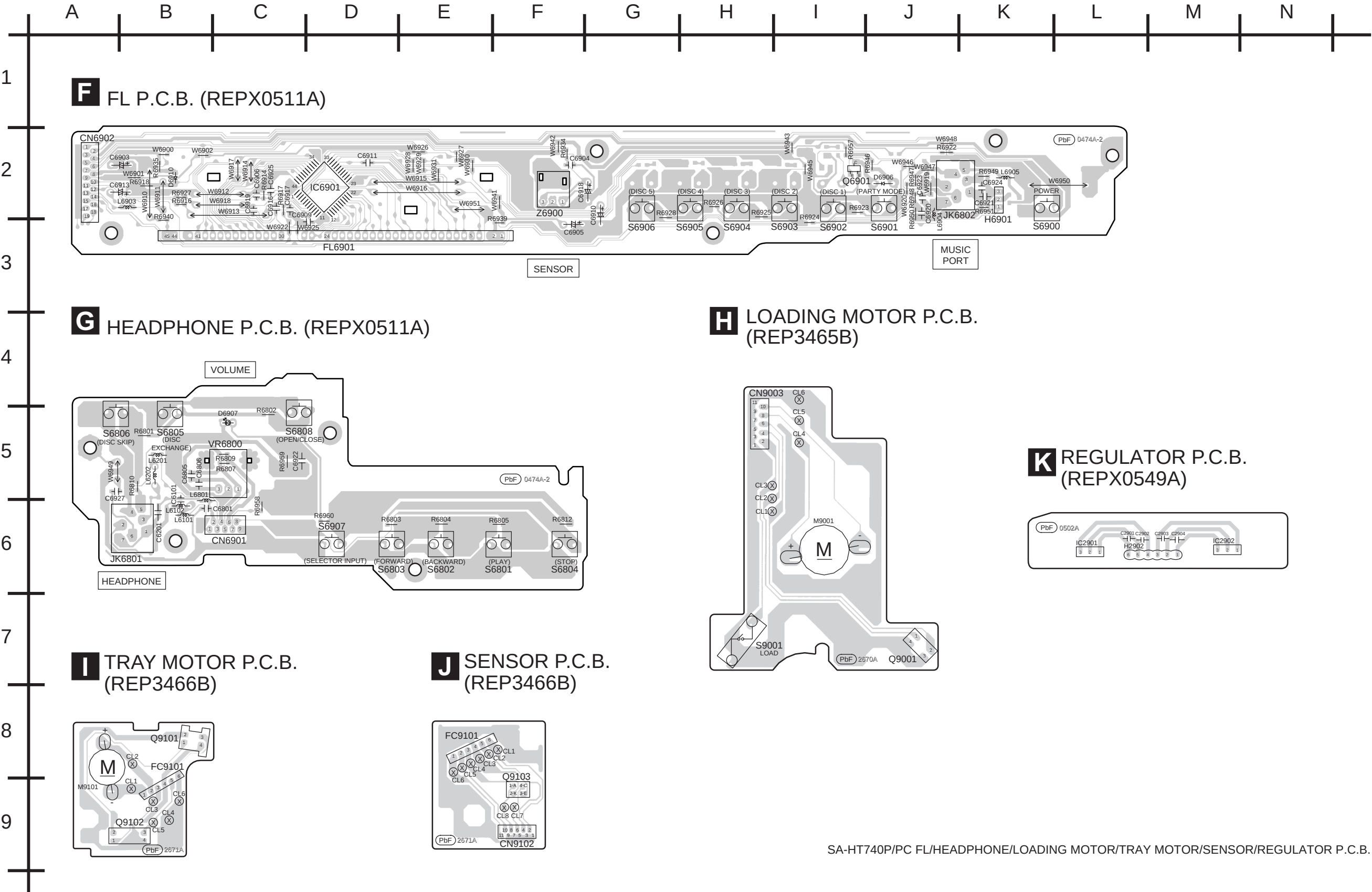








19.4. (E) FL, Headphone, Loading motor, Tray motor, Sensor & Regulator P.C.B.



SA-HT740P/PC FL/HEADPHONE/LOADING MOTOR/TRAY MOTOR/SENSOR/REGULATOR P.C.B.

20 Basic Troubleshooting Guide

20.1. Basic Troubleshooting Guide for Traverse Unit (HDMI Module P.C.B)

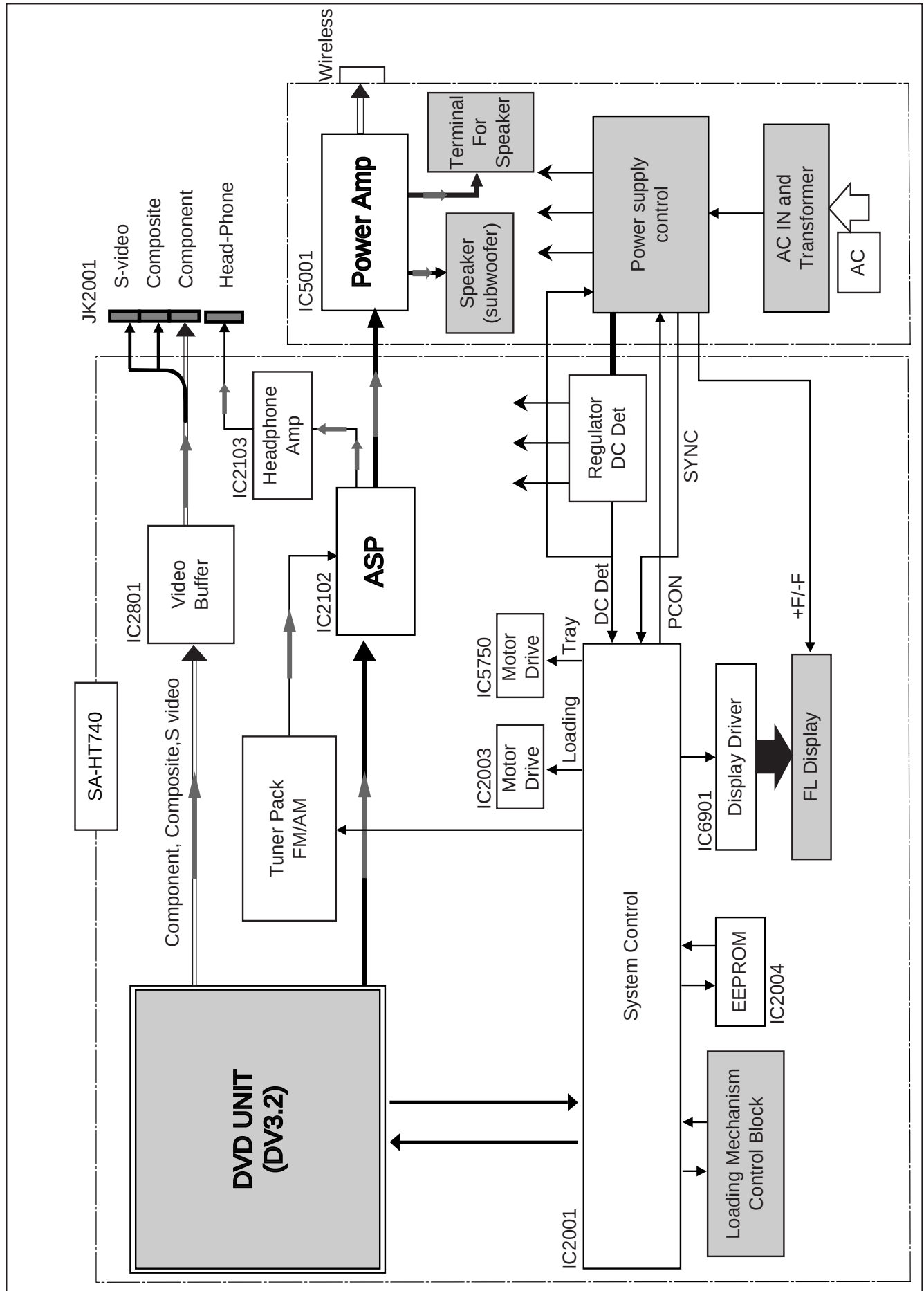
Problems	Checking Points	Checking components
1) Distorted picture or abnormal sound is heard during initialisation	a) Check SDRAM address, data bus, CLK and other control signals waveform	IC8051
	b) Check video signals	LB8301, R8321, R8322, LB8302, R8325, R8326
	c) Check audio DAC circuitry *Compare the above with OK condition Module	IC8421 *Check for solder short and/or component missing/damaged
2) No TOC/Long TOC	a) Check motor driver circuitry (voltages)	IC8251
	b) Check laser drive circuitry (voltages and current)	Q8550, Q8551, Q8552, Q8560, Q8561, Q8562
	c) Check LSI connection to motor drive circuitry *Compare the above with OK condition Module	IC8001 *Check for solder short and/or component missing/damaged
3) Disc not spinning	a) Check connection from Backend Module to Traverse unit	FP8201
4) Traverse not moving		
5) Traverse and spindle abnormal movement	b) Check motor driver circuitry on voltages and control signals *Compare the above with OK condition Module	IC8251 *Check for solder short and/or component damaged
6) Cannot read disc but spindle is spinning - Cannot read CD - Cannot read DVD	a) Check laser drive circuitry (voltages and current) - Check CD laser drive - Check DVD laser drive *Check voltages and LD current and compare with OK Module	Q8550, Q8551, Q8552, Q8560, Q8561, Q8562 Q8550, Q8560, Q8561, Q8562 Q8550, Q8551, Q8552, Q8560 *Check for solder short and/or component missing/damaged
7) Block noise during play	a) Check SDRAM address and data bus signal *Compare the above with OK condition Module	IC8051 *Check for solder short and/or component damaged

Problems	Checking Points	Checking components
8) Jitter out of specification	a) Check LD current b) Check OPU (change to other unit and confirm)	OPU unit (FFC connection)

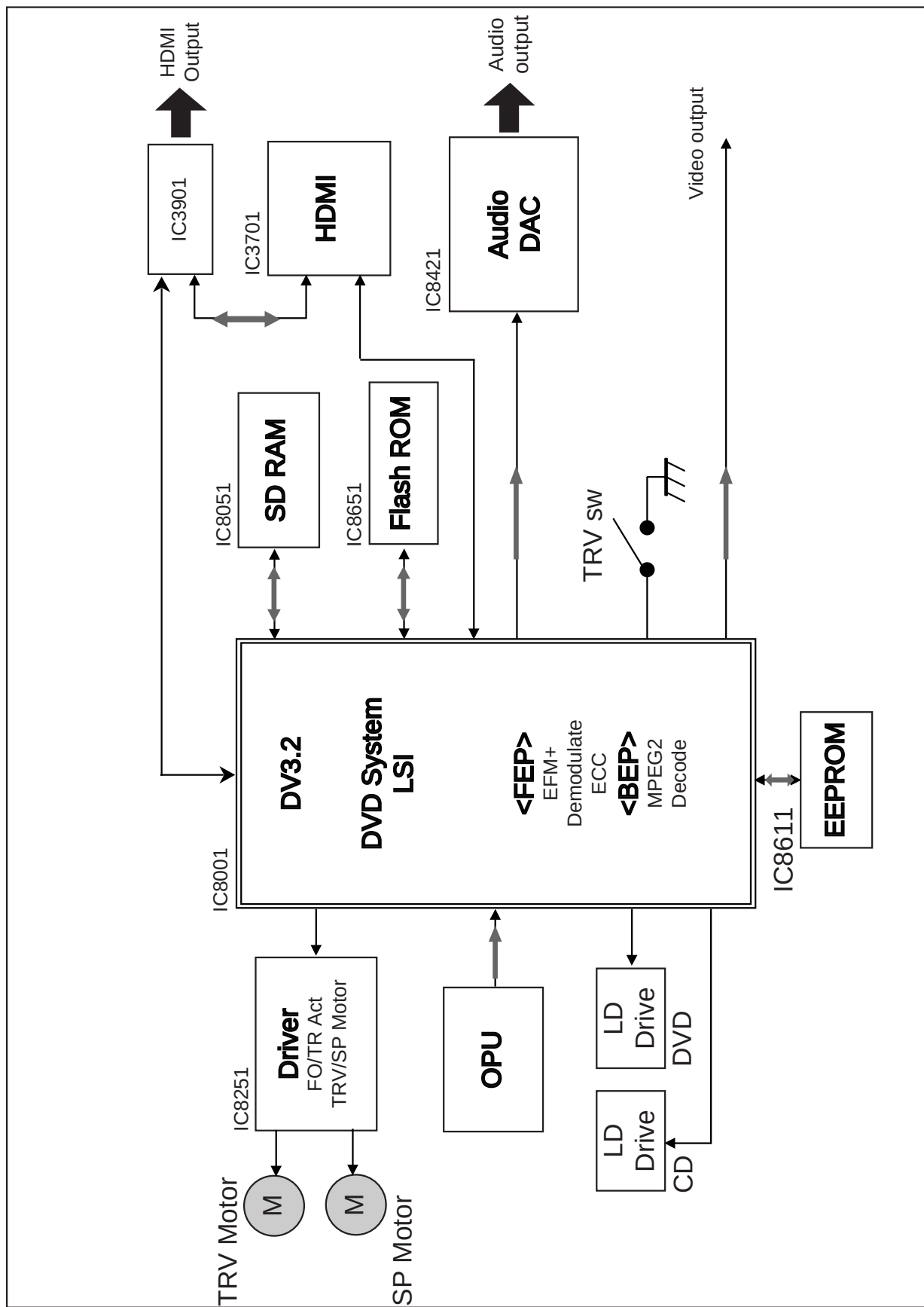
20.2. Basic Troubleshooting Guide for HDMI AV output

Problems	Checking Points	Checking components
1) TV does not have display. Set FL display shows U702 / U703.	1) Check setting of the set in Setup Menu whether HDMI video output is turned ON.	
	2) +5V supply to TV	IC3952 (Pin 4)
	3) HDMI Connector Solderability condition	P3901
	4) HDMI Output TMDS signal lines - Data - Clock	L3903, L3904, L3905 L3906
	5) HDMI Transmitter communication lines to TV - Data , SDA - Clock, SCL	LB3905, R3905, Q3902, R3904 LB3904, R3907, Q3903, R3906
	6) HDMI Transmitter communication lines from LSI	RX3902
	7) Local Port Slave Address setting resistor	R3921
	8) HDMI Transmitter +3.3V supply	LB3901, L3901, L3902
	9) HDMI Transmitter +1.8V supply	IC3782 (Pin1), LB3902
	10) HDMI Up-con +3.3V supply	LB3701
	11) HDMI Pixel clock output from Up-Con to HDMI Transmitter	LB3702
	12) Up-Con IC I2C Data and Clock Line	RX3706
	13) Hot-Plug signal	LB3906, R3902, R3903, Q3901, D3901
	14) TMDS output swing amplitude control resistor	R3901
	15) Host Interface External Input Clock from LSI (IC8001) to Up-Con IC (IC3701)	LB8702
	16) Video data lines from LSI (IC8001) to Up-Converter (IC3701)	RX3707, RX3708, RX3701
2) When switching the video output mode from 480p to 720p / 1080i, the TV display becomes blank.	1) Supply for IC3701 up-conversion pin - Pins : 55, 57, 62, 67, 71, 75, 79	LB3703
3) Picture shown on TV not clear / sharp	1) Up-Converter (IC3701) Luminance output	RX3702
4) Colour Problem. TV Screen is White / Blue / Purple.	1) Up-Converter (IC3701) Component Y, Pb, Pr output	RX3703, RX3704, RX3705
5) HDMI got no audio output.	1) Audio Data Lines	RX8403, RX8402 *Check for solder short and/or component missing/damaged as well as signal condition

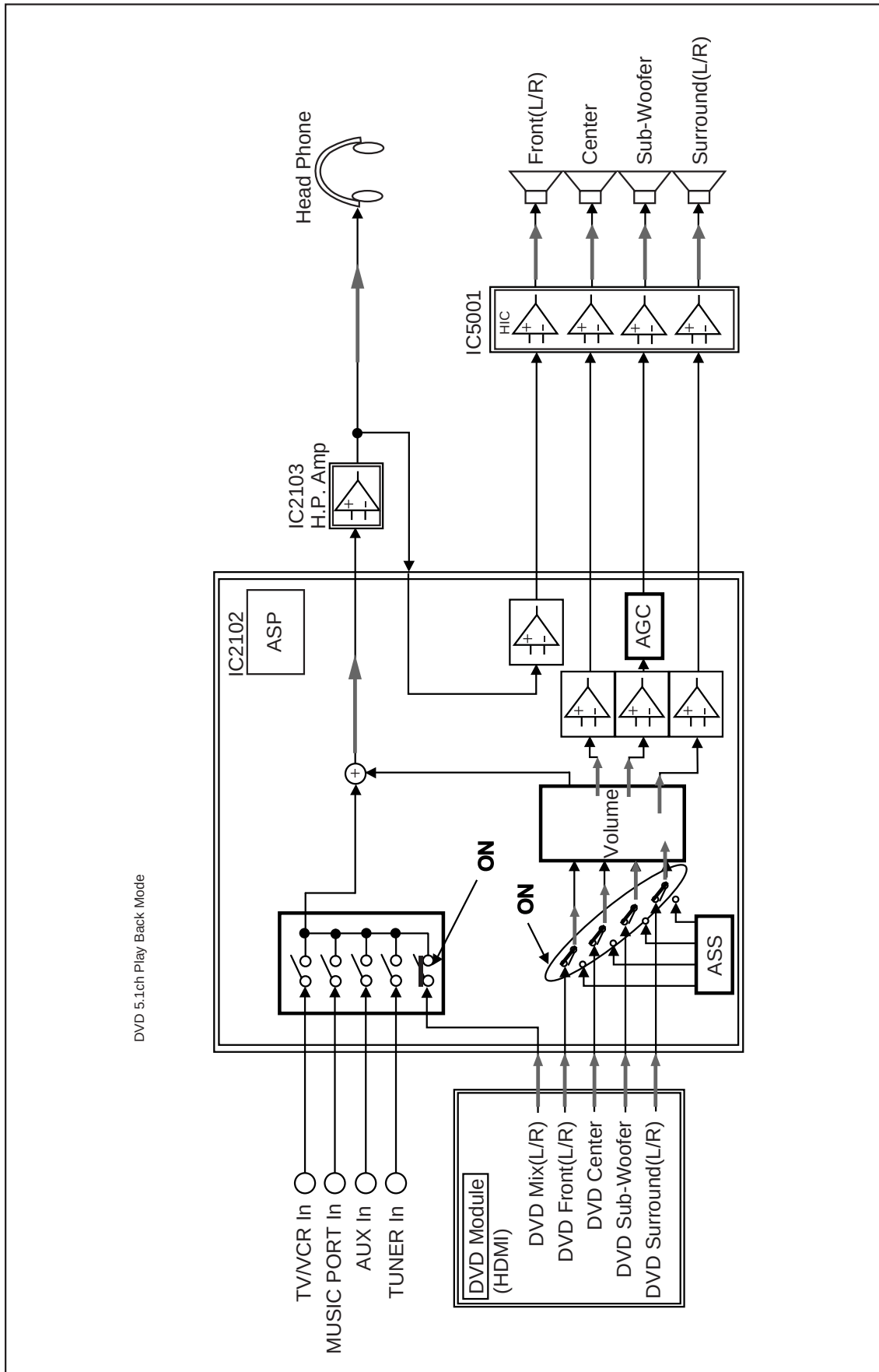
21 Overall Block Diagram for HT740



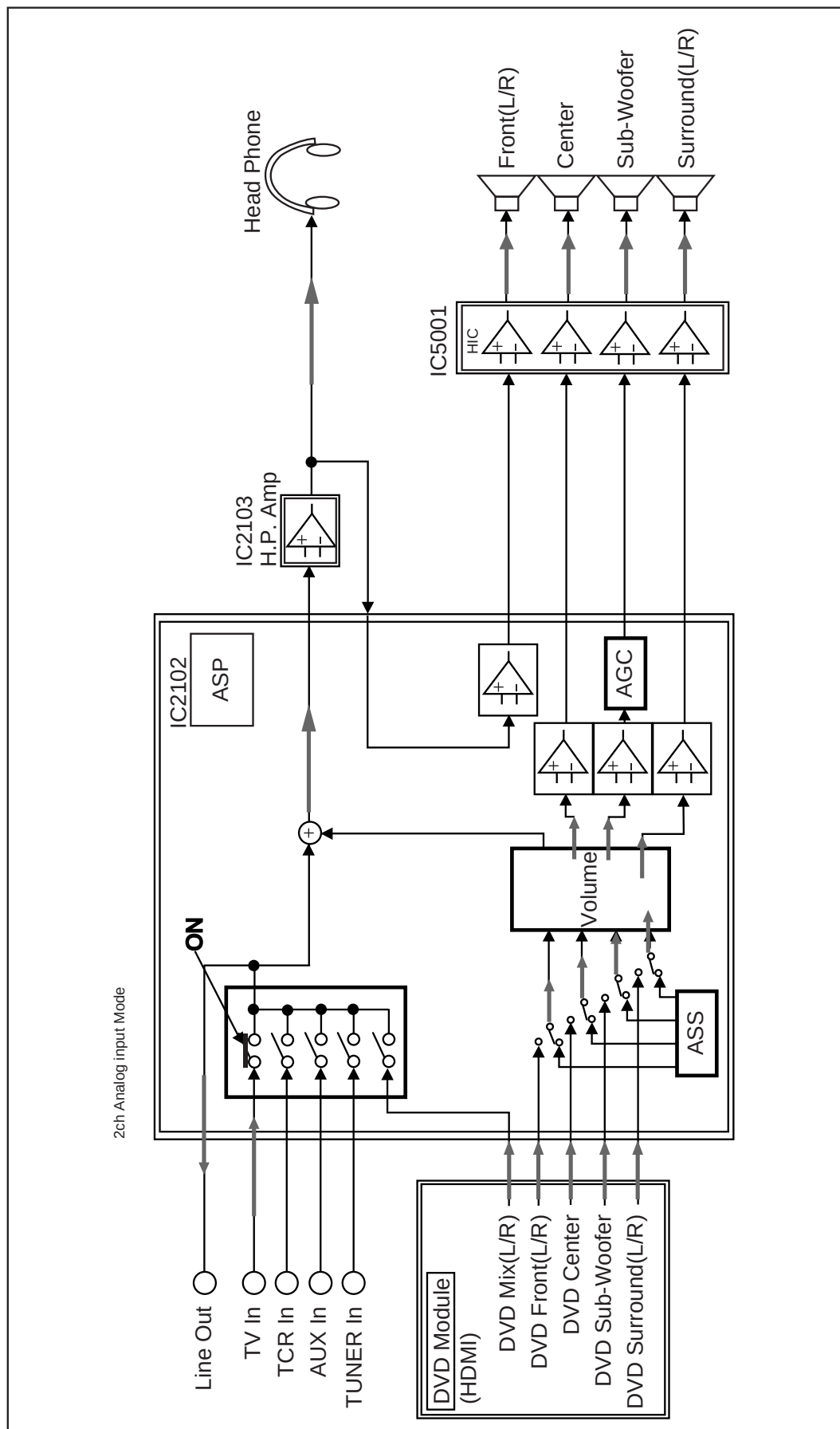
21.1. HT740 DVD Unit Block Diagram



21.2. HT740 Block Diagram (Analog Signal : DVD 5.1ch Play Back Mode)



21.3. HT740 Block Diagram (Analog Signal : 2ch Analog Input Mode)



22 Terminal Function of ICs

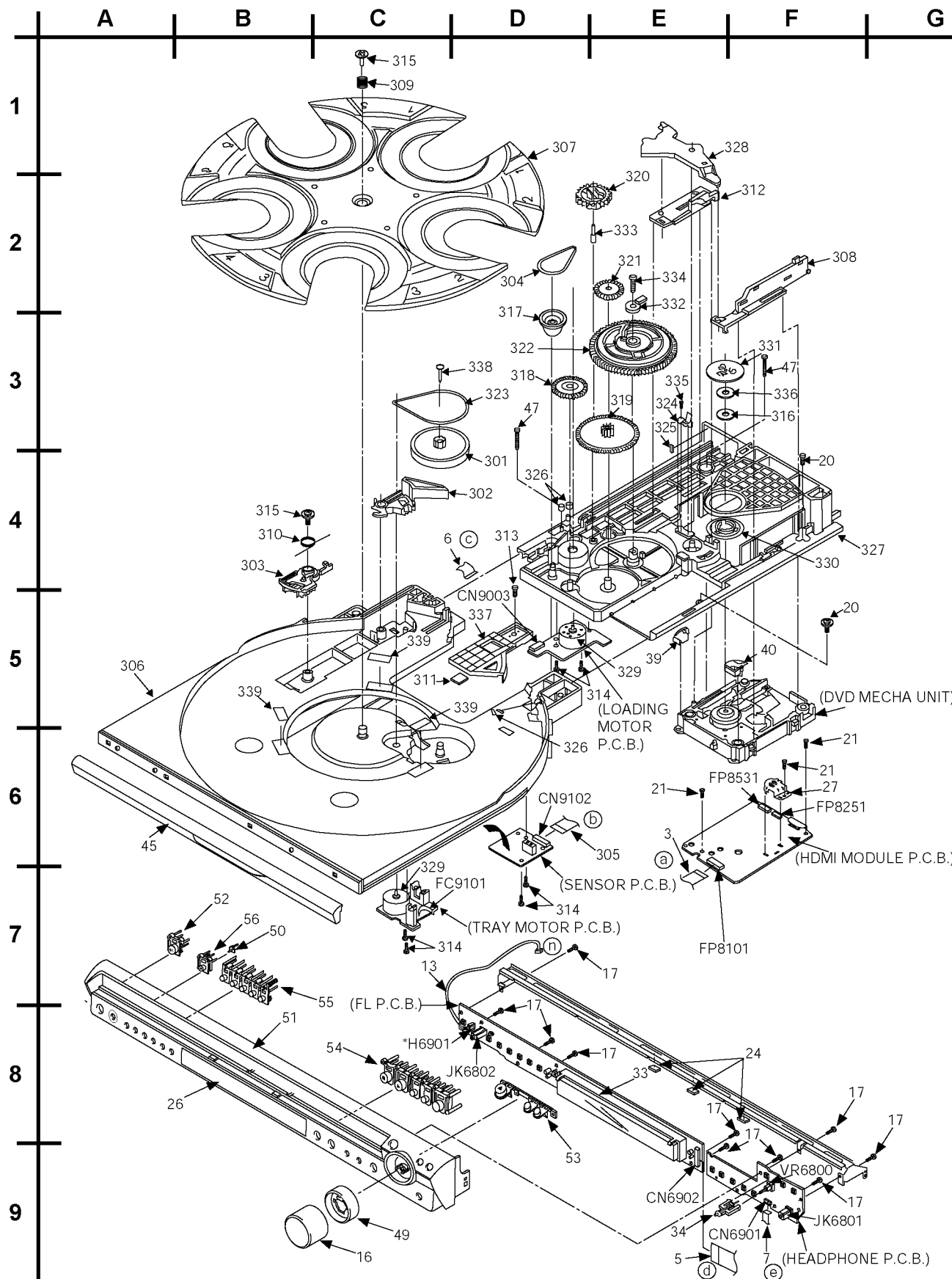
22.1. IC2001 (MN101C49GHF): Operation CPU

Pin No.	Terminal Name	I/O	Function
1	AVSS	-	Power supply for A_D converter
2	KEY1	I	Key 1 line input
3	KEY2	I	Key 2 line input
4	DES1	I	Tuner region setting
5	DES2	I	Model code Digit 1
6	DES3	I	DVD region setting
7	DISC SENSE	I	Disc sensor (RC1)
8	DES4	I	Model code Digit 2
9	DES5	I	Model code Digit 3
10	VREF+	-	+ Power supply for A_D converter
11	VCC	-	Power supply (5V)
12	XOUT	-	Main clock output (8MHz)
13	XIN	-	Main clock input (8MHz)
14	VSS	-	GND (0V)
15	VSS	-	GND (0V)
16	N.C	-	No connection
17	VSS	-	GND (0V)
18	DVD_PCONT	O	DVD module power control
19	RF_DET (WM_DET)	I	RF module detection - wireless ready
20	RF_LINK _ WM_LINK	I	RF link control - wireless ready
21	RF_PCNT (WM_UNMUTE)	O	RF power control
22	N.C	-	No connection
23	EDA	I_O	EEPROM data
24	ECK	O	EEPROM clock
25	ECS	O	EEPROM latch
26	RMT	I	REMOCON input
27	HOTPLUG	I	HDMI interrupt 1
28	CEC_IN	I	HDMI interrupt 2
29	POS_SW	I	Position sensor (RC1)
30	PULSE	I	Pulse sensor speed detection (RC1)
31	SYNC	I	AC failure detect input
32	VSS	-	GND (0V)
	VPP	-	Power supply (Flash Micom only)
33	RESET	I	System reset
34	PWM	O	Pulse width modulation (RC1)
35	AM_BP	O	AM beat proof
36	TU_SCL (PLL_CK)	O	Tuner clock
37	TU_SDA (PLL_DA)	O	Tuner data
38	TU_SD	I	Tuner signal detect
39	ST_DO (TU_ST)	I	Stereo indicator_data (Tuner to Opecon)
40	FM_DET	I	Tuner FM detect (Tuner to Opecon)
41	VPP	-	Power supply (Flash Micom only)
42	DVD_CMD	O	DVD Command (Opecon to syscon)
43	DVD_STA	I	DVD status (Syscon to Opecon)
44	DVD_CK	I	DVD clock (Syscon to Opecon)
45	MUTE_DVD	I	DVD mute (Syscon to Opecon)
46	CHG_DIR (ROLE_CH)	O	Wireless module change direction (Tx_Rx)
47	RMPORT_DET	I	Rear M.Port detect
48	ASP_DA	O	ASP data (R2S15203FP)
49	ASP_CK	O	ASP clock (R2S15203FP)

Pin No.	Terminal Name	I/O	Function
50	MUTE_HP	O	Headphone mute
51	MP_SEL (SELECT_A)	O	Select front MPort or rear MPort
52	SUB_LIMITER	O	Subwoofer frequency Limiter
53	VMUTE	O	Video mute control
54	N.C	-	No connection
55	WIDE_SURR	O	Surround Enhancer
56	CEC_OUT	I	Output port for HDMI
57	WS_EN	I	Surround Enhancer Enable
58	AGC_SW	-	Connection GND via resistor
59	REG1	I	Speaker protection (For Latin America)
60	MODEL_SEL1	I	Model selector
61	MODEL_SEL2	I	Model selector
62	HB_EN	I	H.Bass enable (H=Enable, L=Disable)
63	N.C	-	No connection
64	MOD_DA	O	Digital amplifier standby control
65	HOP_DA (FHOP)	O	Digital Amp frequency hop control
66	MUTE_FSUB	O	Front_subwoofer mute
67	N.C	-	No connection
68	MUTE_SC	O	Surround_centre mute
69	LOAD (CAM_SW)	I	UP_DOWN switch (RC1)
70	OPEN_SW	I	OPEN switch (RC1)
71	PCONT	O	Relay power control (System)
72	N.C	-	No connection
73	N.C	-	No connection
74	N.C	-	No connection
75	N.C	-	No connection
76	N.C	-	No connection
77	N.C	-	No connection
78	N.C	-	No connection
79	N.C	-	No connection
80	N.C	-	No connection
81	DC_DET	I	DC detection (System)
82	DISC1_LED	O	Disc LED 1
83	WS_LED	O	Wide surround LED
84	N.C	-	No connection
85	N.C	-	No connection
86	N.C	-	No connection
87	FLD_STB	-	FL driver strobe
88	N.C	-	No connection
89	FL_CK	O	FL driver clock
90	FL_DAT	O	FL driver data
91	JOG_A	I	Volume jog signal A
92	JOG_B	I	Volume jog signal B
93	JOG_LED	O	Volume jog LED (For HT1040)
94	LOAD_REV	O	Loading motor control (Open_close-RC1)
95	VSS	-	-ve Power supply for D_A converter
96	LOAD_FWD	O	Loading motor control (Open_close-RC1)
97	TURN_FWD	O	Tray motor control (Turn-RC1)
98	TURN_REW	O	Tray motor control (Turn-RC1)
99	N.C	-	No connection
100	VDD	-	+ve Power supply for D_A converter

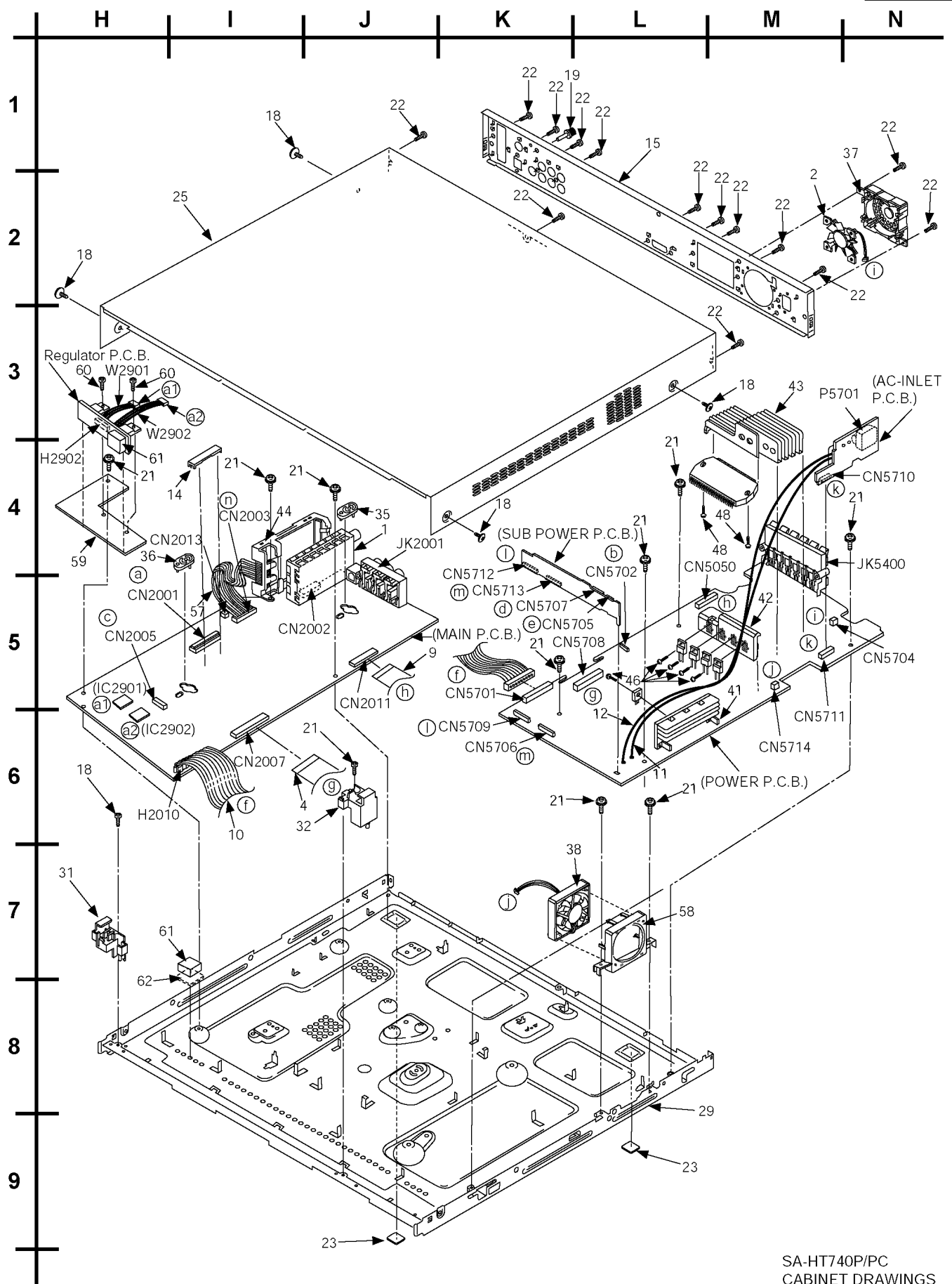
23 Explode Views

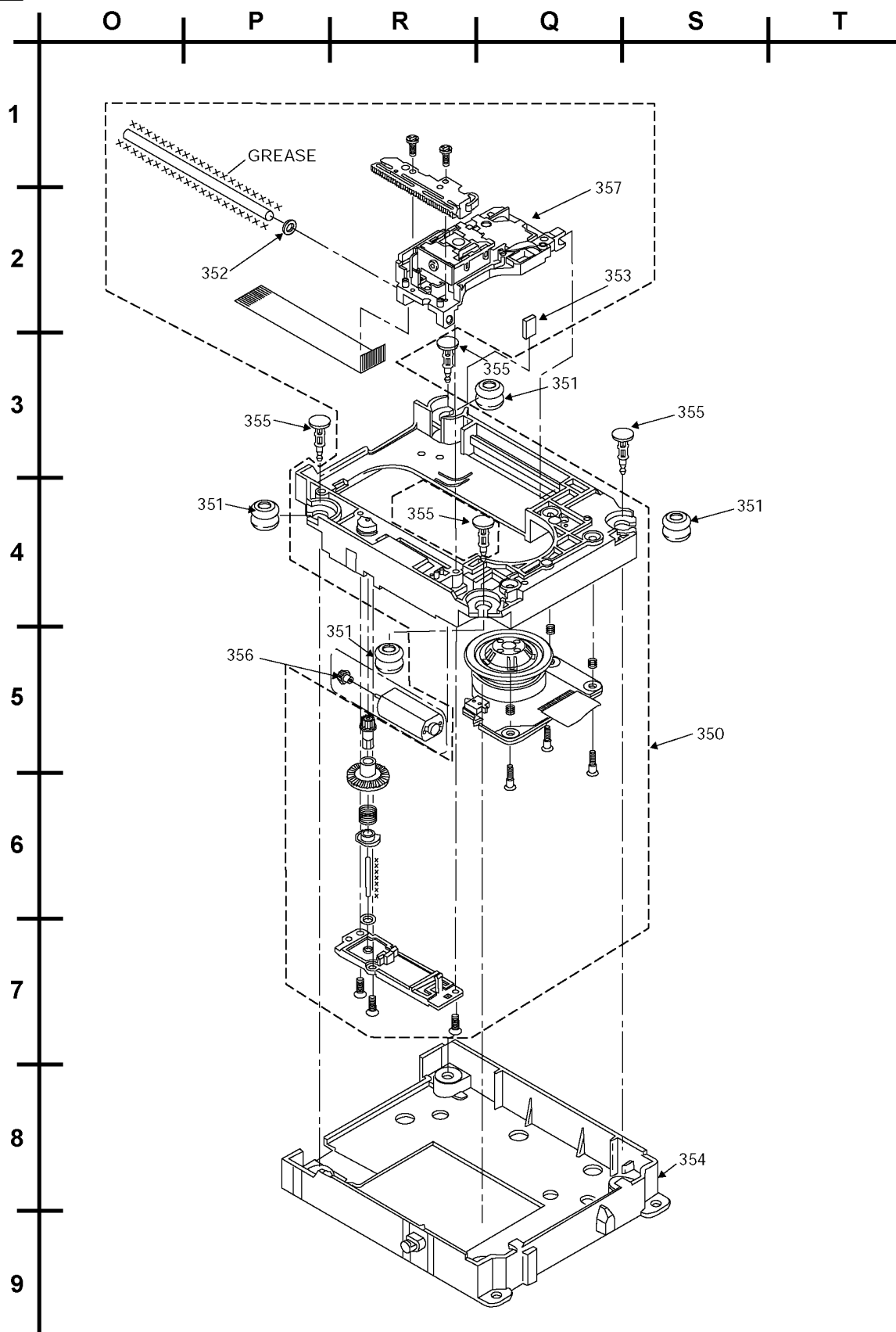
23.1. Cabinet Parts Location



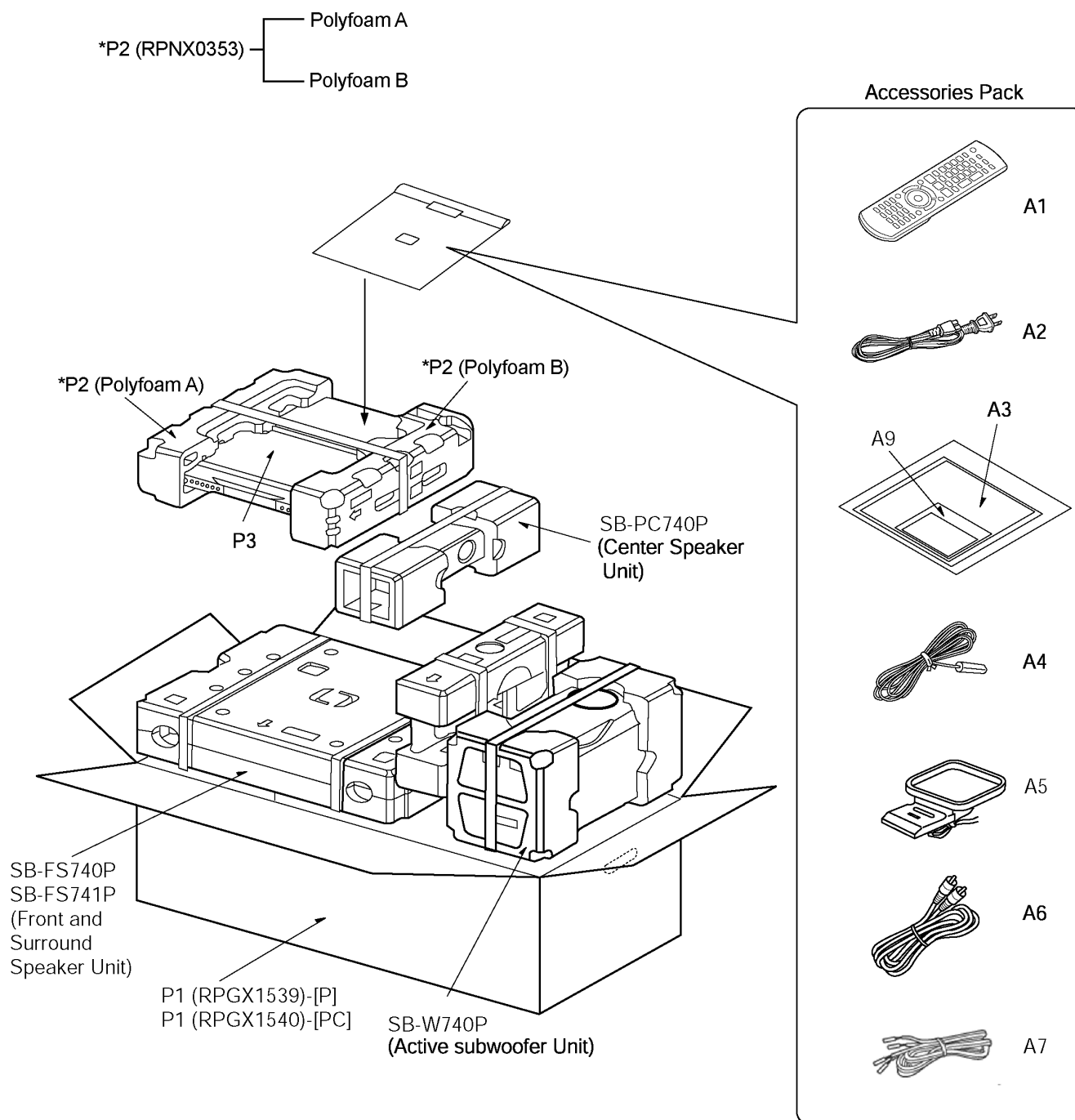
TAKE NOTE '*' PART IS NOT SUPPLIED.

SA-HT740P/PC
CABINET DRAWINGS



SA-HT740P/PC
TRAVERSE MECHAISM DRAWINGS

23.2. Packaging



24 Replacement Parts List

Notes:

*Important safety notice:

Components identified by $\triangle$ mark have special characteristics important for safety purpose.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

*Warning: This product uses a laser diode. Refer to caution statements.

*Capacity values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM).

*The parenthesized indications in the Remarks columns specify the model names and areas. (Refer to the cover page)

*The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

*Reference for O/I book languages are as follows:

[En: English, Cf: Canadian French]

*[M] indicates in the Remarks columns indicates parts supplied by PAVCSG.

*[SPG] indicates in the Remarks columns indicates parts supplied by SPG [PAVC].

24.1. Component Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	J3CCBC000012	TUNER PACK	[M]
2	L6FAYYYH0001	FAN UNIT	[M]
3	REEX0519	50P WIRE	[M]
4	REEX0520	30P WIRE	[M]
5	REEX0521	19P WIRE	[M]
6	REEX0524	11P WIRE	[M]
7	REEX0526	9P WIRE	[M]
9	REEX0523	17P FFC WIRE	[M]
10	REXX0499	13P WIRE	[M]
11	REXX0500	PRIMARY WIRE	[M]
12	REXX0512-1	PRYMARY WIRE	[M]
13	REXX0518	3P MUSIC PORT WIRE	[M]
14	RGQX0027	TOP FFC COVER	[M]
15	RGRX0056A-A1	REAR CABINET	[M] P
15	RGRX0056A-B	REAR CABINET	[M] PC
16	RGWX0076-S	VOLUME KNOB	[M]
17	RHD26046	SCREW	[M]
18	RHD30007-1SJ	SCREW	[M]
19	RHD30070	EARTH TERMINAL	[M]
20	RHD30107-1	SCREW	[M]
21	RHD30090-1	SCREW	[M]
22	RHD30119-S	SCREW	[M]
23	RKA0059-K	LEG RUBBER	[M]
24	RKAX0030-K	CUSHION FELT	[M]
25	RKMX0118-S1	TOP CABINET	[M]
26	RKWX0255-Q	FL ORNAMENT	[M]
27	RMAX0090	MECHA/P BRACKET	[M]
29	RMXX0115-1	BOTTOM CHASSIS	[M]
31	RMN0730	TRAY GUIDE L	[M]
32	RMN0731	TRAY GUIDE R	[M]
33	RMNX0149	FL HOLDER	[M]
34	RMNX0151	LED HOLDER	[M]
35	RMNX0166	MECHA HOLDER A	[M]
36	RMNX0171	MECHA HOLDER B	[M]
37	RMQX0153-H	FAN COVER	[M]
38	RMQX0185	FAN BRACKET	[M]
39	RMX0274	TRAY SUPPORT R	[M]
40	RMX0275	TRAY SUPPORT L	[M]
41	RXXX0067	HEAT SINK (UNIT C)	[M]
42	RXXX0068	HEAT SINK (UNIT D)	[M]
43	RXXX0077	HEAT SINK (UNIT E)	[M]
44	RYPX0113-X	TRANSM/CHASSIS ASS'Y	[M]
45	RYQX0231-S1	TRAY LID ASS'Y	[M]
46	XTB3+10JFJ	SCREW	[M]
47	XTB3+16JFJ	SCREW	[M]
48	XTW3+15TFJ	SCREW	[M]
49	RGKX0329-Q	LIGHTING RING	[M]
50	RGLX0130-Q	SURROUND LIGHT CHIP	[M]
51	RGPX0210-S	FRONT PANEL	[M] P
51	RGPX0210A-S	FRONT PANEL	[M] PC
52	RGUX0647-S	POWER BUTTON	[M]
53	RGUX0648-S	OPEN/CLOSE BUTTON	[M]
54	RGUX0649-S	PLAY BUTTON	[M]
55	RGUX0650-S	5 DISC BUTTON	[M]
56	RGUX0667-S	SURROUND BUTTON	[M]
57	K1NA11B00003	WIRELESS CONNECTOR	[M]
58	L6FAJCC00007	SIDE FAN	[M]
59	RMXX0166	HEATSINK	[M]
60	XTB3+10JFJ	SCREW	[M]
61	RKAX0030-K	RUBBER CUSHION	[M]
62	RMNX0191	PC SHEET	[M]
		CASSETTE DECK	
		TRAVERSE DECK	
301	RDG0567	PULSE GEAR	[M]
302	RDG0568	OPEN LOCK GEAR	[M]
303	RDG0569	CLOSE LOCK GEAR	[M]
304	RDV0073	TRAY BELT	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
305	REZ1734	FFC WIRE	[M]
306	RGQ0446-K	TRAY BASE	[M]
307	RGQ0359-K	ROTARY TRAY	[M]
308	RMM0254-2	SLIDE PLATE R	[M]
309	RMB0842	TRAY SPRING	[M]
310	RME0384	CLOSE LOCK GEAR SPRI	[M]
311	RMF0324-1	BLOCK SHEET	[M]
312	RMM0255	SLIDE PLATE L	[M]
313	XTB3+10JFJ	SCREW	[M]
314	XTN26+8GFJ	SCREW	[M]
315	XTWS3+10SFJ	SCREW	[M]
316	RHM0003-J	MAGNET	[M]
317	RDG0562	PULLEY GEAR	[M]
318	RDG0563	REALAY GEAR A	[M]
319	RDG0564	RELAY GEAR B	[M]
320	RDG0565	DRIVE GEAR A	[M]
321	RDG0566	DRIVE GEAR B	[M]
322	RDG0570	CAM GEAR	[M]
323	RDV0072	LOADING BELT	[M]
324	RMC0387	SUPPORT SPRING	[M]
325	RMG0615-K	CUSHION SHEET	[M]
326	RMG0620-K	CUSHION RUBBER	[M]
327	RMK0555	MECHA BASE	[M]
328	RML0646	CHANGE LEVER	[M]
329	REM0112	LOADING MOTOR ASS'Y	[M]
330	RMR1446-X	CLAMPER	[M]
331	RMR1447-X	MAGNET HOLDER	[M]
332	RMR1507-X	SUPPORT PIECE	[M]
333	RMS0802-J	DRIVE SHAFT	[M]
334	XTN26+14JFJK	SUPPORT PIECE SCREW	[M]
335	XTV2+6GFJ	PCB SCREW	[M]
336	XWG6FFJ	WASHER	[M]
337	RMM0256-2	BLOCK BASE	[M]
338	RMS0123-1	FIXED PIN B	[M]
339	RMF0182	TRAY FELT	[M]
350	RAE2019W-S	DT6 TRAVERSE	[M]
351	RMG0598-A	FLOATING RUBBER	[M]
352	RMG0617-H	CUSHION RUBBER A	[M]
353	RMG0618-H	CUSHION RUBBER B	[M]
354	RMR1753-X	MIDDLE CHASSIS	[M]
355	RMS0789	FIXED PIN	[M]
356	RXQ0946	TRAVERSE MOTOR ASS'Y	[M]
357	RXQ1391	DVD OPU SUB ASS'Y	[M]
		PRINTED CIRCUIT BOARDS	
	REP4034A	HDMI MODULE P.C.B.	[M] (RTL)
	REPX0532A	MAIN P.C.B.	[M] (RTL)
	REPX0511A	POWER P.C.B.	[M] (RTL)
	REPX0511A	SUB POWER P.C.B.	[M] (RTL)
	REPX0511A	AC INLET P.C.B.	[M] (RTL)
	REPX0511A	FL P.C.B.	[M] (RTL)
	REPX0511A	HEADPHONE P.C.B.	[M] (RTL)
	REP3465B	LOADING MOTOR P.C.B.	[M] (RTL)
	REP3466B	TRAY MOTOR P.C.B.	[M] (RTL)
	REP3466B	SENSOR MOTOR P.C.B.	[M] (RTL)
	REPX0549A	REGULATOR P.C.B	[M] (RTL)
		INTEGRATED CIRCUITS	
IC2001	MN101C49GHF	IC SYSTEM CONTROL	[M]
IC2003	COGAG0000007	IC MOTOR DRIVE LOADING	[M]
IC2102	C1BB00001098	IC ASP	[M]
IC2103	COAABB000125	IC HEADPHONES AMP	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
IC2105	C0ABCB000088	IC MUSIC PORT AMP	[M]
IC2301	C0JBAR000326	IC 4 CHANNEL SW	[M]
IC2801	C9ZB00000461	IC VIDEO BUFFER	[M]
IC2901	C0DAZYY00001	IC +9V REGULATOR	[M]
IC2902	C0DAZYY00001	IC +9V REGULATOR	[M]
IC2903	C0DAAMH00012	IC SW REGULATOR	[M]
IC2904	C0CAADE00007	IC +5V REGULATOR	[M]
IC2906	C0JBAR000326	IC MPORT SELECTOR	[M]
IC2907	C0CBADG00023	IC+5V REGULATOR (DVD)	[M]
IC2908	C0CBADG00023	IC +5V REGULATOR (DVD)	[M]
IC3701	MN864701	IC HDMI TRASMITTER	[M]
IC3782	C0CBCAD00082	IC 1.8V DC-DC CONVERTER	[M]
IC3901	C1AB00002239	IC HDMI TRASMITTER	[M]
IC3931	C0JBAA000344	IC AND GATE (HDMI ON/OFF)	[M]
IC3952	C0CBCDC00063	IC +5V REGULATOR	[M]
IC5001	RSN704D65-P	IC DIGITAL POWER AMP	[M]
IC5002	C0ABBA000163	IC DUAL OP AMP	[M]
IC5004	C0CBADG00023	IC TERMINAL	[M]
IC5010	C0JBAB000472	IC INVERTER GATE	[M]
IC5701	C0DAAMH00004	IC SW REGULATOR	[M]
IC5702	C0DABFC00002	IC SHUNT REGULATOR	[M]
IC5703	C0ABBB000067	IC DIFFERENTIAL AMP	[M]
IC5705	C0CAAYG00011	IC TERMINAL	[M]
IC5721	C0DABYY00002	IC SW REGULATOR	[M]
IC5750	C0GAG0000007	IC MOTOR DRIVE (TRAY)	[M]
IC6901	C0HBB0000057	IC DISPLAY DRIVER	[M]
IC8001	MN2DS0009AP	IC DV3.2 LSI	[M]
IC8051	C3ABPG000133	IC 64M SDRAM	[M]
IC8111	C0DBZYY00018	IC 3.3V DC-DC CONVERTER	[M]
IC8151	C0DBEHG00006	IC 1.2V REGULATOR	[M]
IC8251	C0GBG0000048	IC MOTOR DRIVER	[M]
IC8421	C0FBBK000050	IC AUDIO DAC	[M]
IC8601	C0EBA0000029	IC RESET	[M]
IC8606	C0EBE0000455	IC RESET	[M]
IC8651	RFKWMHA0L160	IC 16M FLASH ROM	[M]
IC8691	C0JBAA000346	IC AND GATE	[M]
IC8695	C0JBAA000346	IC AND GATE	[M]
IC8701	C0JBAB000614	INVERTER	[M]
		TRANSISTORS	
Q2001	B1GBCFJJ0051	TRANSISTOR	[M]
Q2003	B1GBCFLL0037	TRANSISTOR	[M]
Q2006	B1GBCFJN0033	TRANSISTOR	[M]
Q2095	B1GDCFJJ0047	TRANSISTOR	[M]
Q2098	B1GBCFJN0033	TRANSISTOR	[M]
Q2101	B1GFGCAA0001	TRANSISTOR	[M]
Q2201	B1GDCFGA0018	TRANSISTOR	[M]
Q2307	B1GFGCAA0001	TRANSISTOR	[M]
Q2308	B1GFGCAA0001	TRANSISTOR	[M]
Q2309	B1GBCFJN0033	TRANSISTOR	[M]
Q2310	B1GDCFGA0018	TRANSISTOR	[M]
Q2602	B1ABGC000001	TRANSISTOR	[M]
Q2603	B1GDCFGA0018	TRANSISTOR	[M]
Q2901	B1ABCF000176	TRANSISTOR	[M]
Q2903	B1BACD000018	TRANSISTOR	[M]
Q2904	B1AAKD000012	TRANSISTOR	[M]
Q2906	B1BCCD000019	TRANSISTOR	[M]
Q2907	B1ADCF000001	TRANSISTOR	[M]
Q2909	B1GBCFJN0033	TRANSISTOR	[M]
Q2911	B1ABCF000176	TRANSISTOR	[M]
Q2912	B1ABCF000176	TRANSISTOR	[M]
Q2913	B1ABCF000176	TRANSISTOR	[M]
Q2914	B1ADCF000001	TRANSISTOR	[M]
Q2935	B1BACD000018	TRANSISTOR	[M]
Q3901	2SD1819A0L	TRANSISTOR	[M]
Q3902	B1CFHA000002	TRANSISTOR	[M]
Q3903	B1CFHA000002	TRANSISTOR	[M]
Q5001	B1ABCF000011	TRANSISTOR	[M]
Q5002	B1ABCF000011	TRANSISTOR	[M]
Q5014	B1ABCF000011	TRANSISTOR	[M]
Q5015	B1ADBL000010	TRANSISTOR	[M]
Q5022	B1ABCF000011	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q5023	B1ABCF000011	TRANSISTOR	[M]
Q5025	B1ABCF000011	TRANSISTOR	[M]
Q5031	B1ADBL000010	TRANSISTOR	[M]
Q5095	B1ABCF000011	TRANSISTOR	[M]
Q5096	B1ABCF000011	TRANSISTOR	[M]
Q5701	2SC3940ARA	TRANSISTOR	[M]
Q5702	B1ABCF000011	TRANSISTOR	[M]
Q5703	B1ABCF000176	TRANSISTOR	[M]
Q5704	B1ADBL000010	TRANSISTOR	[M]
Q5705	B1ABCF000176	TRANSISTOR	[M]
Q5706	B1AAKD000012	TRANSISTOR	[M]
Q5726	B1ABCF000011	TRANSISTOR	[M]
Q5740	B1BACG000048	TRANSISTOR	[M]
Q5741	B1ABCF000011	TRANSISTOR	[M]
Q5742	B1ABCF000011	TRANSISTOR	[M]
Q5744	B1ABCF000011	TRANSISTOR	[M]
Q5745	B3PBA0000237	TRANSISTOR	[M]
Q5746	B1GBCFJN0033	TRANSISTOR	[M]
Q5747	B1GDCFJJ0047	TRANSISTOR	[M]
Q5748	B3PBA0000237	TRANSISTOR	[M]
Q5750	B1GBCFJJ0051	TRANSISTOR	[M]
Q5751	2SC3940ARA	TRANSISTOR	[M]
Q5752	B1ACKD000005	TRANSISTOR	[M]
Q5753	B1ADCF000001	TRANSISTOR	[M]
Q5760	B1ABCF000011	TRANSISTOR	[M]
Q5801	B3PBA0000237	TRANSISTOR	[M]
Q5908	B1ACKD000005	TRANSISTOR	[M]
Q5930	B1ABCF000011	TRANSISTOR	[M]
Q5932	B1ADCF000001	TRANSISTOR	[M]
Q6901	B1GBCFJN0033	TRANSISTOR	[M]
Q8551	2SD1819A0L	TRANSISTOR	[M]
Q8552	B1ADGB000008	TRANSISTOR	[M]
Q8561	2SD1819A0L	TRANSISTOR	[M]
Q8562	B1ADGB000008	TRANSISTOR	[M]
QR8111	XP0621400L	CHIP TRANSISTOR	[M]
QR8420	UNR521100L	CHIP TRANSISTOR	[M]
QR8571	UNR511V00L	CHIP TRANSISTOR	[M]
Q9001	B3NAA0000068	CAM SENSOR	[M]
Q9101	B3NAA0000078	POSITION SENSOR	[M]
Q9102	B3NAA0000011	PHOTO INTERRUPTOR	[M]
Q9103	B3NAB0000027	PHOTO REFLECTOR	[M]
PC5701	B3PBA0000237	PHOTOCOUPLER	[M] △
PC5721	B3PBA0000237	PHOTOCOUPLER	[M] △
		DIODES	
D2001	B0ECKM000016	DIODE	[M]
D2002	B0ECKM000016	DIODE	[M]
D2005	B0ACCK000005	DIODE	[M]
D2007	B0ACCK000005	DIODE	[M]
D2008	B0ACCK000005	DIODE	[M]
D2600	B0ACCK000005	DIODE	[M]
D2605	B0ACCK000005	DIODE	[M]
D2608	B0ACCK000005	DIODE	[M]
D2902	B0BC7R500001	DIODE	[M]
D2904	B0JCPD000025	DIODE	[M]
D2906	B0ADCJ000020	DIODE	[M]
D2907	B0ADCJ000020	DIODE	[M]
D2912	B0BC3R700004	DIODE	[M]
D2915	B0BC5R600003	DIODE	[M]
D2934	B0ACCK000005	DIODE	[M]
D2935	B0ACCK000005	DIODE	[M]
D2936	B0ACCK000005	DIODE	[M]
D2950	B0BC7R500001	DIODE	[M]
D2951	B0ADCJ000020	DIODE	[M]
D2952	B0JCAE000001	DIODE	[M]
D3901	MA2J72800L	DIODE	[M]
D5010	B0ACCK000005	DIODE	[M]
D5012	B0ACCE000003	DIODE	[M]
D5013	B0ACCE000003	DIODE	[M]
D5031	B0BC3R400001	DIODE	[M]
D5041	B0ACCK000005	DIODE	[M]
D5701	B0FBAR000018	DIODE	[M] △

Ref. No.	Part No.	Part Name & Description	Remarks
D5702	B0ZAZ0000052	DIODE	[M]
D5703	B0BC02900004	DIODE	[M]
D5704	B0JAME000029	DIODE	[M]
D5705	B0EAMM000057	DIODE	[M]
D5706	B0EAMM000057	DIODE	[M]
D5707	B0BC035A0007	DIODE	[M]
D5708	B0BC01700015	DIODE	[M]
D5709	B0ACCK000005	DIODE	[M]
D5710	B0EAMM000057	DIODE	[M]
D5711	B0HBSM000043	DIODE	[M]
D5713	B0BC4R0A0006	DIODE	[M]
D5716	B0HBSM000043	DIODE	[M]
D5717	B0HBSM000043	DIODE	[M]
D5718	B0HFRJ000012	DIODE	[M]
D5721	B0EAMM000057	DIODE	[M]
D5723	B0EAMM000057	DIODE	[M]
D5724	B0BC3R700004	DIODE	[M]
D5725	B0BC7R500001	DIODE	[M]
D5726	B0BC7R500001	DIODE	[M]
D5740	B0BC01200019	DIODE	[M]
D5743	B0ACCK000005	DIODE	[M]
D5744	B0ACCK000005	DIODE	[M]
D5745	B0EAKM000117	DIODE	[M]
D5746	B0BC5R600003	DIODE	[M]
D5750	B0ECKM000016	DIODE	[M]
D5751	B0ECKM000016	DIODE	[M]
D5752	B0BC5R000009	DIODE	[M]
D5753	B0ACCK000005	DIODE	[M]
D5754	B0ACCK000005	DIODE	[M]
D5771	B0BC01200019	DIODE	[M]
D5772	B0ACCK000005	DIODE	[M]
D5773	B0BC6R700006	DIODE	[M]
D5800	B0EAMM000057	DIODE	[M]
D5903	MAZ82200ML	DIODE	[M]
D6906	B3ABA0000397	DIODE	[M]
D6907	B3AEA0000058	DIODE	[M]
D6910	B0BC2R4A0006	DIODE	[M]
D8211	MA2J11100L	DIODE	[M]
D8571	MA2J72800L	DIODE	[M]
LB3701	J0JHC0000045	CHIP CAPACITOR	[M]
LB3702	J0JCC0000119	CHIP INDUCTOR	[M]
LB3703	J0JHC0000045	CHIP CAPACITOR	[M]
LB3704	J0JCC0000119	CHIP INDUCTOR	[M]
LB3901	J0JHC0000045	CHIP CAPACITOR	[M]
LB3902	J0JHC0000045	CHIP CAPACITOR	[M]
LB3904	J0JCC0000119	CHIP INDUCTOR	[M]
LB3905	J0JCC0000119	CHIP INDUCTOR	[M]
LB3906	J0JCC0000119	CHIP INDUCTOR	[M]
LB5071	J0JKB0000020	EMI BEAD CORE	[M]
LB5072	J0JKB0000020	EMI BEAD CORE	[M]
LB8001	J0JHC0000045	CHIP CAPACITOR	[M]
LB8011	J0JHC0000045	CHIP CAPACITOR	[M]
LB8257	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8258	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8259	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8260	ERJ3GEY0R00V	CHIP JUMPER	[M]
LB8301	J0JBC0000042	CHIP BEAD	[M]
LB8302	J0JBC0000042	CHIP BEAD	[M]
LB8303	J0JBC0000042	CHIP BEAD	[M]
LB8304	J0JBC0000042	CHIP BEAD	[M]
LB8305	J0JBC0000042	CHIP BEAD	[M]
LB8401	J0JBC0000042	CHIP BEAD	[M]
LB8421	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8422	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8423	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8424	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8425	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8426	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8427	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8428	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8429	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8431	ERJ2GE0R00X	CHIP JUMPER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
LB8491	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8530	J0JHC0000045	CHIP CAPACITOR	[M]
LB8531	ERJ2GE0R00X	CHIP JUMPER	[M]
LB8551	J0JBC0000042	CHIP BEAD	[M]
LB8561	J0JBC0000042	CHIP BEAD	[M]
LB8571	J0JBC0000042	CHIP BEAD	[M]
LB8690	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
LB8691	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8692	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8693	ERJ2GEJ101X	CHIP RESISTOR	[M]
LB8701	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
LB8702	J0JBC0000044	HIGH LOSS INDUCTOR	[M]
DZ5701	ERZV10V511CS	ZENER	[M] △
		VARIABLE RESISTORS	
VR6800	EVEKE2F3024M	VR VOLUME JOG	[M]
VA3901	EZJZ0V80008B	VARISTOR	[M]
VA3902	EZJZ0V80008B	VARISTOR	[M]
VA3903	EZJZ0V80008B	VARISTOR	[M]
VA3904	EZJZ0V80008B	VARISTOR	[M]
VA3905	EZJZ0V80008B	VARISTOR	[M]
VA3906	EZJZ0V80008B	VARISTOR	[M]
VA3907	EZJZ0V80008B	VARISTOR	[M]
VA3908	EZJZ0V80008B	VARISTOR	[M]
VA3910	EZJZ0V8000AA	VARISTOR	[M]
VA3911	EZJZ0V8000AA	VARISTOR	[M]
VA3912	EZJZ0V8000AA	VARISTOR	[M]
VA3913	EZJZ0V8000AA	VARISTOR	[M]
		SWITCHES	
S6801	EVQ21405R	SW PLAY	[M]
S6802	EVQ21405R	SW REV	[M]
S6803	EVQ21405R	SW FWD	[M]
S6804	EVQ21405R	SW STOP	[M]
S6805	EVQ21405R	SW DISC EX	[M]
S6806	EVQ21405R	SW SKIP	[M]
S6808	EVQ21405R	SW OPEN/CLOSE	[M]
S6900	EVQ21405R	SW POWER	[M]
S6901	EVQ21405R	SW SURROUND MUSIC	[M]
S6902	EVQ21405R	SW DISC 1	[M]
S6903	EVQ21405R	SW DISC 2	[M]
S6904	EVQ21405R	SW DISC 3	[M]
S6905	EVQ21405R	SW DISC 4	[M]
S6906	EVQ21405R	SW DISC 5	[M]
S6907	EVQ21405R	SW SELECTOR	[M]
S9001	K0L1BA000086	OPEN SWITCH	[M]
		CONNECTORS	
CN2001	K1MY50AA0029	50P CONNECTOR	[M]
CN2002	K1KA10AA0031	10P CONNECTOR	[M]
CN2003	K1MP11A00004	11P CONNECTOR	[M]
CN2005	K1MN11A00030	11P CONNECTOR	[M]
CN2007	K1MN30BA0005	30P CONNECTOR	[M]
CN2011	K1MN17B00037	17P CONNECTOR	[M]
CN2013	K1KA03AA0193	3P CONNECTOR	[M]
CN5050	K1MN17BA0005	17P CONNECTOR	[M]
CN5701	K1KA13BA0062	13P CONNECTOR	[M]
CN5702	K1MN11AA0003	11P CONNECTOR	[M]
CN5704	K1KA03AA0301	3P CONNECTOR	[M]
CN5705	K1MN09B00038	9P CONNECTOR	[M]
CN5706	K1KA14AA0031	14P CONNECTOR	[M]
CN5707	K1MN19B00072	19P CONNECTOR	[M]
CN5708	K1MN30AA0004	30P CONNECTOR	[M]
CN5709	K1KA14AA0031	14P CONNECTOR	[M]
CN5710	K1KB06B00038	6P CONNECTOR	[M]
CN5711	K1KA06AA0031	6P CONNECTOR	[M]
CN5712	K1KB14B00026	14P CONNECTOR	[M]
CN5713	K1KB14B00026	14P CONNECTOR	[M]
CN5714	K1KA03AA0301	3P CONNECTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
CN6901	K1MN09B00038	9P CONNECTOR	[M]
CN6902	K1MN19AA0004	19P CONNECTOR	[M]
CN9003	K1MY11BA0021	11P CONNECTOR	[M]
CN9102	K1MY11BA0021	11P CONNECTOR	[M]
FP8101	K1MN50BA0173	50P CONNECTOR	[M]
FP8251	K1MN06AA0046	6P CONNECTOR	[M]
FP8531	K1MN26AA0041	26P CONNECTOR	[M]
		COILS & TRANSFORMERS	
L2001	J0JBC0000015	CHIP INDUCTOR	[M]
L2002	J0JBC0000015	CHIP INDUCTOR	[M]
L2003	J0JBC0000015	CHIP INDUCTOR	[M]
L2008	G0C3R3JA0027	COIL	[M]
L2009	G0C220JA0055	COIL	[M]
L2101	J0JBC0000015	CHIP INDUCTOR	[M]
L2201	J0JBC0000015	CHIP INDUCTOR	[M]
L2802	J0JBC0000015	CHIP INDUCTOR	[M]
L2803	J0JBC0000015	CHIP INDUCTOR	[M]
L2804	J0JBC0000015	CHIP INDUCTOR	[M]
L2805	J0JBC0000015	CHIP INDUCTOR	[M]
L2806	J0JBC0000015	CHIP INDUCTOR	[M]
L2807	J0JBC0000015	CHIP INDUCTOR	[M]
L2902	G0A101ZA0028	COIL	[M]
L2903	G0A200D00002	COIL	[M]
L2905	G0A200D00002	COIL	[M]
L2906	G0A200D00002	COIL	[M]
L2908	G0A200D00002	COIL	[M]
L2909	G0A200D00002	COIL	[M]
L2910	G0A200D00002	COIL	[M]
L2912	G0A200D00002	COIL	[M]
L3901	G1C100K00019	CHIP COIL	[M]
L3902	G1C100K00019	CHIP COIL	[M]
L3903	J0MAB0000170	INDUCTOR	[M]
L3904	J0MAB0000170	INDUCTOR	[M]
L3905	J0MAB0000170	INDUCTOR	[M]
L3906	J0MAB0000170	INDUCTOR	[M]
L5021	ELJPC220KFB	COIL	[M]
L5023	ELJPC220KFB	COIL	[M]
L5100	G0B9R5K00001	COIL	[M]
L5105	ETQA15A150T	COIL	[M]
L5200	G0B9R5K00001	COIL	[M]
L5300	G0B9R5K00001	COIL	[M]
L5309	ETQA15A150T	COIL	[M]
L5400	G0B9R5K00001	COIL	[M]
L5500	G0B9R5K00001	COIL	[M]
L5503	ETQA17A150T	COIL	[M]
L5600	G0B9R5K00001	COIL	[M]
L5601	ETQA17A150T	COIL	[M]
L5701	J0MBA0000013	AC LINE FILTER	[M] △
L5703	ELF22V035B	COIL	[M] △
L5704	J0JKB0000020	EMI BEAD CORE	[M]
L5705	J0JBC0000019	CHIP INDUCTOR	[M]
L5750	J0JBC0000015	CHIP INDUCTOR	[M]
L5751	J0JKB0000020	EMI BEAD CORE	[M]
L5752	J0JBC0000015	CHIP INDUCTOR	[M]
L5753	J0JBC0000015	CHIP INDUCTOR	[M]
L6101	J0JBC0000019	CHIP INDUCTOR	[M]
L6102	G0C330KA0065	COIL	[M]
L6201	J0JBC0000019	CHIP INDUCTOR	[M]
L6202	G0C330KA0065	COIL	[M]
L6801	J0JBC0000019	CHIP INDUCTOR	[M]
L6903	J0JBC0000041	CHIP INDUCTOR	[M]
L6904	J0JBC0000019	CHIP INDUCTOR	[M]
L6905	J0JBC0000019	CHIP INDUCTOR	[M]
L8201	G1C100K00019	CHIP COIL	[M]
L8301	G1C100K00019	CHIP COIL	[M]
L8302	G1C100K00019	CHIP COIL	[M]
L8501	G1C100K00019	CHIP COIL	[M]
L8550	G1C100KA0055	CHIP INDUCTOR	[M]
T5701	ETS42BJD4AD	TRANSFORMER	[M] △
T5721	ETS19AB216AG	TRANSFORMER	[M] △

Ref. No.	Part No.	Part Name & Description	Remarks
		COMPONENT COMBINATION	
Z6900	B3MAZ0000023	REMOTE CONTROL SENSOR	[M]
		OSCILLATORS	
X2001	H2D800400009	CRYSTAL	[M]
X5010	H2A375300003	CERAMIC RESISTOR	[M]
X5011	H2A415300001	CERAMIC RESISTOR	[M]
X8621	H0J270500085	CRYSTAL	[M]
		DISPLAY TUBE	
FL6901	A2BD00000160	FL DISPLAY	[M]
FL8101	F1H0J1050018	INDUCTOR	[M]
FL8102	F1H0J1050018	INDUCTOR	[M]
FL8103	F1H0J1050018	INDUCTOR	[M]
FL8104	F1J1E1040022	INDUCTOR	[M]
FL8421	F1H0J1050018	INDUCTOR	[M]
		FUSE	
F1	K5D802APA008	FUSE	[M] △
		FUSE HOLDERS	
FP2000	K5G202AA0002	FUSE PROTECTOR	[M] △
ZA5701	EYF52BCY	FUSE HOLDER	[M]
ZA5702	EYF52BCY	FUSE HOLDER	[M]
		THERMISTOR	
TH5701	D4CAA2R20001	THERMISTOR	[M]
TH5702	D4CC11040013	SENSOR	[M]
		HOLDERS	
H2010	K1YZ13000001	13 PIN HOLDER	[M]
H2902	RJSIA5506	6 PIN HOLDER	[M]
		JACKS	
JK2001	K1U717B00004	JK COMBO	[M]
JK5400	K4AC12B00003	JK SPEAKER	[M]
JK6801	K2HC103A0024	JK SMALL SIGN	[M]
JK6802	K2HC1YYA0005	JK JUMPER WIRE	[M]
P3901	K1FY119H0001	CONNECTOR	[M]
P5701	K2AB2B000008	JK AC INLET	[M] △
		EARTH TERMINALS	
E2900	K4CZ01000027	TERMINALS	[M]
ZJ5701	K9Z200001279	EARTH TERMINAL	[M]
ZJ5702	K9Z200001279	EARTH TERMINAL	[M]
		PACKING MATERIALS	
P1	RPGX1539	PACKING CASE	[M] P
P1	RPGX1540	PACKING CASE	[M] PC
P2	RPNX0353	POLYFOAM	[M]
P3	RPFXX0058-1J	MIRAMAT	[M]
		ACCESSORIES	
A1	EUR7662Y30	REMOTE CONTROL	[M]
A1-1	UR76EC5903A	R/C BATTERY COVER	[M]
A2	K2CB2CB00018	AC CORD	[M] △
A3	RQT8582-P	O/I BOOK (EN)	[M] P
A3	RQT8583-C	O/I BOOK (CF)	[M] PC
A4	RSA0007-L	FM ANTENNA	[M]
A5	N1DAAA000002	AM LOOP ANTENNA	[M]
A6	K2KA2BA00001	VIDEO CABLE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
A7	REEX0449B-1L	SPEAKER CORD	[M]
A9	RQCA0968	SPEAKER LABEL	[M]
		RESISTORS	
R2001	ERJ3GEYJ331V	330 1/16W	[M]
R2002	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2003	ERJ3GEYJ103V	10K 1/16W	[M]
R2004	ERJ3GEYJ331V	330 1/16W	[M]
R2005	ERJ3GEYJ331V	330 1/16W	[M]
R2006	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2012	ERJ3GEYJ101V	100 1/16W	[M]
R2013	ERJ3GEYJ101V	100 1/16W	[M]
R2014	ERJ3GEYJ221V	220 1/16W	[M]
R2015	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2016	ERJ3GEYJ473V	47K 1/16W	[M]
R2017	ERJ3GEYJ103V	10K 1/16W	[M]
R2018	ERJ3GEYJ103V	10K 1/16W	[M]
R2019	ERJ3GEYJ103V	10K 1/16W	[M]
R2020	ERJ3GEYJ103V	10K 1/16W	[M]
R2021	ERJ3GEYJ103V	10K 1/16W	[M]
R2022	ERJ3GEYJ821V	820 1/16W	[M]
R2023	ERJ3GEY0R00V	0 1/16W	[M]
R2024	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2025	ERJ3GEYJ221V	220 1/16W	[M]
R2026	ERJ3GEYJ221V	220 1/16W	[M]
R2027	ERJ3GEYJ101V	100 1/16W	[M]
R2028	ERJ3GEYJ101V	100 1/16W	[M]
R2029	ERJ3GEYJ101V	100 1/16W	[M]
R2030	ERJ3GEYJ101V	100 1/16W	[M]
R2031	ERJ3GEYJ101V	100 1/16W	[M]
R2032	ERJ3GEYJ101V	100 1/16W	[M]
R2033	ERJ3GEYJ102V	1K 1/16W	[M]
R2034	ERJ3GEYJ221V	220 1/16W	[M]
R2035	ERJ3GEYJ221V	220 1/16W	[M]
R2036	ERJ3GEYJ221V	220 1/16W	[M]
R2037	ERJ3GEYJ221V	220 1/16W	[M]
R2038	ERJ3GEYJ221V	220 1/16W	[M]
R2039	ERJ3GEYJ223V	22K 1/16W	[M]
R2040	ERJ3GEYJ223V	22K 1/16W	[M]
R2041	ERJ3GEYJ223V	22K 1/16W	[M]
R2042	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2043	ERJ3GEYJ104V	100K 1/16W	[M]
R2044	ERJ3GEYJ221V	220 1/16W	[M]
R2045	ERJ3GEYJ221V	220 1/16W	[M]
R2048	ERJ3GEY0R00V	0 1/16W	[M]
R2049	ERJ3GEY0R00V	0 1/16W	[M]
R2051	ERJ3GEYJ103V	10K 1/16W	[M]
R2052	ERJ3GEYJ221V	220 1/16W	[M]
R2053	ERJ3GEYJ221V	220 1/16W	[M]
R2054	ERJ3GEYJ221V	220 1/16W	[M]
R2055	ERJ3GEYJ221V	220 1/16W	[M]
R2057	ERJ3GEYJ221V	220 1/16W	[M]
R2058	ERJ3GEYJ221V	220 1/16W	[M]
R2059	ERJ3GEYJ221V	220 1/16W	[M]
R2060	ERJ3GEYJ221V	220 1/16W	[M]
R2061	ERJ3GEYJ473V	47K 1/16W	[M]
R2062	ERJ3GEYJ221V	220 1/16W	[M]
R2063	ERJ3GEYJ221V	220 1/16W	[M]
R2064	ERJ3GEYJ103V	10K 1/16W	[M]
R2065	ERJ3GEYJ103V	10K 1/16W	[M]
R2066	ERJ3GEYJ104V	100K 1/16W	[M]
R2067	ERJ3GEYJ473V	47K 1/16W	[M]
R2068	ERJ3GEYJ563V	56K 1/16W	[M]
R2069	ERJ3GEYJ473V	47K 1/16W	[M]
R2070	ERJ3GEYJ473V	47K 1/16W	[M]
R2071	ERJ3GEYJ563V	56K 1/16W	[M]
R2073	ERJ3GEYJ473V	47K 1/16W	[M]
R2077	ERJ3GEYJ221V	220 1/16W	[M]
R2078	ERJ3GEYJ221V	220 1/16W	[M]
R2079	ERJ3GEYJ221V	220 1/16W	[M]
R2080	ERJ3GEYJ221V	220 1/16W	[M]
R2081	ERJ3GEYJ221V	220 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2082	ERJ3GEYJ221V	220 1/16W	[M]
R2084	ERJ3GEYJ473V	47K 1/16W	[M]
R2085	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2086	ERJ3GEYJ223V	22K 1/16W	[M]
R2087	ERJ3GEYJ223V	22K 1/16W	[M]
R2088	ERJ3GEYJ221V	220 1/16W	[M]
R2089	ERJ3GEYJ221V	220 1/16W	[M]
R2090	ERJ3GEYJ103V	10K 1/16W	[M]
R2101	ERJ3GEYJ103V	10K 1/16W	[M]
R2111	ERJ3GEYJ103V	10K 1/16W	[M]
R2112	ERJ3GEYJ223V	22K 1/16W	[M]
R2113	ERJ3GEY0R00V	0 1/16W	[M]
R2114	ERJ3GEYJ153V	15K 1/16W	[M]
R2115	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2160	ERJ3GEYJ102V	1K 1/16W	[M]
R2161	ERJ3GEYJ473V	47K 1/16W	[M]
R2164	ERJ3GEYJ103V	10K 1/16W	[M]
R2165	ERJ3GEYJ103V	10K 1/16W	[M]
R2168	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2169	ERJ3GEYJ104V	100K 1/16W	[M]
R2170	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2171	ERJ3GEYJ273V	27K 1/16W	[M]
R2172	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2173	ERJ3GEYJ473V	47K 1/16W	[M]
R2175	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2176	ERJ3GEYJ563V	56K 1/16W	[M]
R2177	ERJ3GEYJ220V	22 1/16W	[M]
R2178	ERJ3GEYJ220V	22 1/16W	[M]
R2179	ERJ3GEYJ220V	22 1/16W	[M]
R2180	ERJ3GEYJ220V	22 1/16W	[M]
R2181	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2185	ERJ3GEYJ123V	12K 1/16W	[M]
R2188	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2189	ERJ3GEYJ102V	1K 1/16W	[M]
R2191	ERJ3GEYJ223V	22K 1/16W	[M]
R2193	ERJ3GEYJ100V	10 1/16W	[M]
R2194	ERJ3GEYJ273V	27K 1/16W	[M]
R2195	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2196	ERJ3GEYJ333V	33K 1/16W	[M]
R2197	ERJ3GEYJ683V	68K 1/16W	[M]
R2198	ERJ3GEY0R00V	0 1/16W	[M]
R2201	ERJ3GEYJ103V	10K 1/16W	[M]
R2211	ERJ3GEYJ103V	10K 1/16W	[M]
R2212	ERJ3GEYJ223V	22K 1/16W	[M]
R2214	ERJ3GEYJ153V	15K 1/16W	[M]
R2215	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2218	ERJ3GEY0R00V	0 1/16W	[M]
R2260	ERJ3GEYJ102V	1K 1/16W	[M]
R2261	ERJ3GEYJ473V	47K 1/16W	[M]
R2264	ERJ3GEYJ103V	10K 1/16W	[M]
R2265	ERJ3GEYJ103V	10K 1/16W	[M]
R2268	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2269	ERJ3GEYJ104V	100K 1/16W	[M]
R2270	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2271	ERJ3GEYJ563V	56K 1/16W	[M]
R2273	ERJ3GEYJ473V	47K 1/16W	[M]
R2275	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2276	ERJ3GEYJ563V	56K 1/16W	[M]
R2277	ERJ3GEYJ220V	22 1/16W	[M]
R2278	ERJ3GEYJ220V	22 1/16W	[M]
R2279	ERJ3GEYJ220V	22 1/16W	[M]
R2280	ERJ3GEYJ220V	22 1/16W	[M]
R2281	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2285	ERJ3GEYJ123V	12K 1/16W	[M]
R2288	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2289	ERJ3GEYJ102V	1K 1/16W	[M]
R2291	ERJ3GEYJ223V	22K 1/16W	[M]
R2293	ERJ3GEYJ100V	10 1/16W	[M]
R2294	ERJ3GEYJ273V	27K 1/16W	[M]
R2295	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2296	ERJ3GEYJ333V	33K 1/16W	[M]
R2297	ERJ3GEYJ683V	68K 1/16W	[M]
R2298	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2300	ERJ3GEYJ123V	12K 1/16W	[M]
R2301	ERJ3GEYJ473V	47K 1/16W	[M]
R2302	ERJ3GEYJ183V	18K 1/16W	[M]
R2303	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2304	ERJ3GEYJ123V	12K 1/16W	[M]
R2312	ERJ3GEYJ103V	10K 1/16W	[M]
R2327	ERJ3GEYJ273V	27K 1/16W	[M]
R2328	ERJ3GEYJ563V	56K 1/16W	[M]
R2336	ERJ3GEYJ103V	10K 1/16W	[M]
R2339	ERJ3GEYJ273V	27K 1/16W	[M]
R2343	ERJ3GEY0R00V	0 1/16W	[M]
R2344	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2400	ERJ3GEYJ123V	12K 1/16W	[M]
R2401	ERJ3GEYJ473V	47K 1/16W	[M]
R2402	ERJ3GEYJ183V	18K 1/16W	[M]
R2403	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2404	ERJ3GEYJ123V	12K 1/16W	[M]
R2412	ERJ3GEYJ103V	10K 1/16W	[M]
R2436	ERJ3GEYJ103V	10K 1/16W	[M]
R2439	ERJ3GEYJ273V	27K 1/16W	[M]
R2443	ERJ3GEY0R00V	0 1/16W	[M]
R2444	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2500	ERJ3GEYJ123V	12K 1/16W	[M]
R2501	ERJ3GEYJ223V	22K 1/16W	[M]
R2502	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2503	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2510	ERJ3GEYJ103V	10K 1/16W	[M]
R2511	ERJ3GEYJ103V	10K 1/16W	[M]
R2512	ERJ3GEYJ273V	27K 1/16W	[M]
R2513	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2600	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2601	ERJ3GEYJ333V	33K 1/16W	[M]
R2602	ERJ3GEYJ103V	10K 1/16W	[M]
R2603	ERJ3GEYJ103V	10K 1/16W	[M]
R2604	ERJ3GEYJ103V	10K 1/16W	[M]
R2605	ERJ3GEYJ123V	12K 1/16W	[M]
R2606	ERJ3GEYJ103V	10K 1/16W	[M]
R2607	ERJ3GEYJ103V	10K 1/16W	[M]
R2608	ERJ3GEYJ563V	56K 1/16W	[M]
R2609	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2610	ERJ3GEYJ563V	56K 1/16W	[M]
R2611	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2612	ERJ3GEYJ683V	68K 1/16W	[M]
R2617	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2619	ERJ3GEYJ123V	12K 1/16W	[M]
R2620	ERJ3GEYJ104V	100K 1/16W	[M]
R2621	ERJ3GEYJ393V	39K 1/16W	[M]
R2622	ERJ3GEY0R00V	0 1/16W	[M]
R2623	ERJ3GEYJ563V	56K 1/16W	[M]
R2624	ERJ3GEYJ273V	27K 1/16W	[M]
R2625	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2626	ERJ3GEYJ683V	68K 1/16W	[M]
R2627	ERJ3GEYJ683V	68K 1/16W	[M]
R2628	ERJ3GEYJ103V	10K 1/16W	[M]
R2629	ERJ3GEYJ103V	10K 1/16W	[M]
R2630	ERJ3GEY0R00V	0 1/16W	[M]
R2631	ERJ3GEYJ393V	39K 1/16W	[M]
R2632	ERJ3GEYJ223V	22K 1/16W	[M]
R2633	ERJ3GEYJ390V	100K 1/16W	[M]
R2634	ERJ3GEYJ390V	100K 1/16W	[M]
R2635	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2640	ERJ3GEYJ102V	1K 1/16W	[M]
R2641	ERJ3GEYJ102V	1K 1/16W	[M]
R2809	ERJ3GEYJ750V	75 1/16W	[M]
R2812	ERJ3GEYJ750V	75 1/16W	[M]
R2813	ERJ3GEYJ750V	75 1/16W	[M]
R2816	ERJ3GEYJ750V	75 1/16W	[M]
R2817	ERJ3GEYJ750V	75 1/16W	[M]
R2818	ERJ3GEYJ750V	75 1/16W	[M]
R2819	ERJ3GEYJ102V	1K 1/16W	[M]
R2904	ERJ3GEYJ471V	470 1/16W	[M]
R2905	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2906	ERG2SJ471E	470 2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2907	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2908	ERJ3GEYJ561V	560 1/16W	[M]
R2913	ERG2SJ471E	470 2W	[M]
R2914	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2915	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2918	ERJ3GEYJ103V	10K 1/16W	[M]
R2919	ERJ3GEYJ102V	1K 1/16W	[M]
R2920	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2921	ERJ3GEYJ471V	470 1/16W	[M]
R2922	ERJ3GEYJ393V	39K 1/16W	[M]
R2923	ERJ3GEYJ153V	15K 1/16W	[M]
R2925	ERJ2GEJ103X	10K 2W	[M]
R2925	ERX2SJ1R5E	1.5 2W	[M]
R2927	ERX2SJ1R5E	1.5 2W	[M]
R2930	ERJ3GEYJ333V	33K 1/16W	[M]
R2933	ERJ3GEYJ151V	150 1/16W	[M]
R2934	ERJ3GEYJ102V	1K 1/16W	[M]
R2935	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2936	ERJ3GEYJ181V	180 1/16W	[M]
R2937	ERG2SJ471E	470 2W	[M]
R2938	ERG2SJ471E	470 2W	[M]
R2939	ERJ3GEYJ393V	39K 1/16W	[M]
R2942	ERJ3GEY0R00V	0 1/16W	[M]
R2943	ERJ3GEY0R00V	0 1/16W	[M]
R2945	ERJ3GEYJ104V	100K 1/16W	[M]
R2946	ERJ3GEYJ330V	33 1/16W	[M]
R2947	ERJ3GEYJ104V	100K 1/16W	[M]
R2950	ERJ3GEYJ221V	220 1/16W	[M]
R2951	ERJ3GEYJ221V	220 1/16W	[M]
R2952	ERJ3GEYJ221V	220 1/16W	[M]
R2953	ERJ3GEYJ221V	220 1/16W	[M]
R2955	ERJ3GEYJ221V	220 1/16W	[M]
R2960	ERJ3GEYJ104V	100K 1/16W	[M]
R2961	ERJ3GEYJ103V	10K 1/16W	[M]
R2962	ERJ3GEYJ473V	47K 1/16W	[M]
R2963	ERJ3GEYJ103V	10K 1/16W	[M]
R2964	ERJ3GEYJ103V	10K 1/16W	[M]
R2965	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2966	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2967	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2968	ERJ3GEYJ104V	100K 1/16W	[M]
R2969	ERJ3GEYJ103V	10K 1/16W	[M]
R2970	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2971	ERJ3GEYJ221V	220 1/16W	[M]
R2972	ERJ3GEYJ221V	220 1/16W	[M]
R2973	ERJ3GEYJ821V	820 1/16W	[M]
R2974	ERJ3GEYJ821V	820 1/16W	[M]
R2975	ERJ3GEYJ103V	10K 1/16W	[M]
R2976	ERJ3GEYJ103V	10K 1/16W	[M]
R2977	ERJ3GEYJ103V	10K 1/16W	[M]
R2979	ERJ3GEYJ103V	10K 1/16W	[M]
R2981	ERJ3GEY0R00V	0 1/16W	[M]
R2983	ERJ3GEY0R00V	0 1/16W	[M]
R2985	ERJ3GEYJ221V	220 1/16W	[M]
R2986	ERJ3GEYJ221V	220 1/16W	[M]
R2987	ERJ3GEYJ221V	220 1/16W	[M]
R2990	D0C18R2JA020	8.2 1W	[M]
R2991	ERJ3GEYJ473V	47K 1/16W	[M]
R2993	ERJ3GEY0R00V	0 1/16W	[M]
R3780	ERJ2GEJ152X	1.5K 2W	[M]
R3781	ERJ2GEJ152X	1.5K 2W	[M]
R3901	ERJ2GEJ511X	510 2W	[M]
R3902	ERJ2GEJ103X	10K 2W	[M]
R3903	ERJ2GEJ103X	10K 2W	[M]
R3904	ERJ2GEJ472X	4.7K 2W	[M]
R3905	ERJ2GEJ202X	2K 2W	[M]
R3906	ERJ2GEJ472X	4.7K 2W	[M]
R3907	ERJ2GEJ222X	2.2K 2W	[M]
R3911	ERJ2GEJ102X	1K 2W	[M]
R3912	ERJ2GEJ472X	4.7K 2W	[M]
R3921	ERJ2GE0R00X	0 2W	[M]
R3924	ERJ2GE0R00X	0 2W	[M]
R3947	ERJ2GEJ103X	10K 2W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5011	ERJ3GEYJ103V	10K 1/16W	[M]
R5012	ERJ3GEYJ101V	100 1/16W	[M]
R5013	ERJ3GEYJ105V	1M 1/16W	[M]
R5014	ERJ3GEYJ105V	1M 1/16W	[M]
R5015	ERJ3GEYJ105V	1M 1/16W	[M]
R5021	ERJ3GEYJ104V	100K 1/16W	[M]
R5022	ERJ3GEYJ104V	100K 1/16W	[M]
R5023	ERJ3GEYJ224V	220K 1/16W	[M]
R5037	ERJ3GEYJ473V	47K 1/16W	[M]
R5038	ERJ3GEYJ224V	220K 1/16W	[M]
R5039	ERJ3GEYJ224V	220K 1/16W	[M]
R5040	ERJ3GEY0R00V	0 1/16W	[M]
R5041	ERJM1WSF10MU	1 1/2W	[M]
R5042	ERJM1WSF10MU	1 1/2W	[M]
R5046	ERJ3GEYJ473V	47K 1/16W	[M]
R5047	ERJ3GEYJ103V	10K 1/16W	[M]
R5048	ERJ3GEYJ473V	47K 1/16W	[M]
R5049	ERJ3GEYJ102V	1K 1/16W	[M]
R5050	ERJ3GEYJ223V	22K 1/16W	[M]
R5051	ERJ3GEYJ223V	22K 1/16W	[M]
R5052	ERJ3GEYJ223V	22K 1/16W	[M]
R5053	ERJ3GEYJ332V	3.3K 1/16W	[M]
R5056	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5057	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5059	ERJ3GEYJ103V	10K 1/16W	[M]
R5060	ERJ3GEYJ103V	10K 1/16W	[M]
R5062	ERJ3GEYJ103V	10K 1/16W	[M]
R5063	ERJ3GEYJ103V	10K 1/16W	[M]
R5065	ERJ3GEYJ101V	100 1/16W	[M]
R5067	ERJ3GEYJ101V	100 1/16W	[M]
R5070	ERJ6GEYJ562V	5.6K 1/10W	[M]
R5071	ERJ3GEY0R00V	0 1/16W	[M]
R5072	ERJ3RBD182V	1.8K 3W	[M]
R5073	ERJ3RBD223V	22K 3W	[M]
R5074	ERJ6GEYJ562V	5.6K 1/10W	[M]
R5076	ERJ8GEY0R00V	0 1/8W	[M]
R5077	ERJ8GEY0R00V	0 1/8W	[M]
R5079	ERJ3GEYJ103V	10K 1/16W	[M]
R5080	ERJ3GEYJ103V	10K 1/16W	[M]
R5081	ERJ3GEYJ823V	82K 1/16W	[M]
R5082	ERJ3GEYJ823V	82K 1/16W	[M]
R5094	ERJ3GEYJ473V	47K 1/16W	[M]
R5099	ERJ3GEYJ473V	47K 1/16W	[M]
R5107	ERJ3GEYJ221V	220 1/16W	[M]
R5109	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5110	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5181	ERJ1TYJ220U	22 1/8W	[M]
R5183	ERJ1TYJ220U	22 1/8W	[M]
R5189	ERJ3GEYJ823V	82K 1/16W	[M]
R5197	ERJ3GEYJ103V	10K 1/16W	[M]
R5208	ERJ3GEYJ221V	220 1/16W	[M]
R5309	ERJ3GEYJ221V	220 1/16W	[M]
R5311	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5386	ERJ1TYJ220U	22 1/8W	[M]
R5391	ERJ3GEYJ683V	68K 1/16W	[M]
R5410	ERJ3GEYJ221V	220 1/16W	[M]
R5411	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5487	ERJ1TYJ220U	22 1/8W	[M]
R5492	ERJ3GEYJ124V	120K 1/16W	[M]
R5493	ERJ3GEYJ223V	22K 1/16W	[M]
R5502	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5504	ERJ3GEYJ473V	47K 1/16W	[M]
R5506	ERJ3GEYJ223V	22K 1/16W	[M]
R5514	ERJ8GEY0R00V	0 1/8W	[M]
R5516	ERJ3GEY0R00V	0 1/16W	[M]
R5517	ERG2SJ220E	22 2W	[M]
R5518	ERJ3GEYJ103V	10K 1/16W	[M]
R5519	ERJ8GEYJ822V	8.2K 1/8W	[M]
R5595	ERJ3GEYJ103V	10K 1/16W	[M]
R5601	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5603	ERJ3GEYJ473V	47K 1/16W	[M]
R5605	ERJ3GEYJ223V	22K 1/16W	[M]
R5613	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5615	ERJ3GEY0R00V	0 1/16W	[M]
R5624	ERJ3GEYJ224V	220K 1/16W	[M]
R5625	ERJ3GEYJ104V	100K 1/16W	[M]
R5626	ERJ3GEYJ103V	10K 1/16W	[M]
R5627	ERJ8GEYJ822V	8.2K 1/8W	[M]
R5696	ERJ3GEYJ103V	10K 1/16W	[M]
R5701	ERC12UGK335D	3.3M 1/2W	[M]
R5702	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5703	ERJ6GEYJ681V	680 1/10W	[M]
R5704	ERX2LJ82MP	0.82 2W	[M]
R5705	ERX2LJ68MP	0.68 2W	[M]
R5706	ERG2SJ333P	33K 2W	[M]
R5707	ERG2SJ333P	33K 2W	[M]
R5708	ERJ6GEYJ332V	3.3K 1/10W	[M]
R5709	ERJ6GEYJ222V	2.2K 1/10W	[M]
R5710	ERJ6GEYJ103V	10K 1/10W	[M]
R5711	ERJ6GEYJ220V	22 1/10W	[M]
R5712	ERJ6GEYJ222V	2.2K 1/10W	[M]
R5713	ERJ3GEYF224V	220K 1/16W	[M]
R5714	ERJ3GEYF562V	5.6K 1/16W	[M]
R5715	ERJ3GEYJ153V	15K 1/16W	[M]
R5716	ERJ3GEYJ181V	180 1/16W	[M]
R5717	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5718	ERJ3GEYJ104V	100K 1/16W	[M]
R5719	ERJ3GEYJ103V	10K 1/16W	[M]
R5720	ERJ3GEYJ103V	10K 1/16W	[M]
R5721	ERJ3GEYJ471V	470 1/16W	[M]
R5722	ERJ3GEYJ103V	10K 1/16W	[M]
R5723	ERJ3GEYF472V	4.7K 1/16W	[M]
R5724	ERJ3GEYF122V	1.2K 1/16W	[M]
R5725	ERJ3GEYF561V	560 1/16W	[M]
R5726	ERJ3GEYJ102V	1K 1/16W	[M]
R5727	ERJ3GEYJ222V	2.2K 1/16W	[M]
R5729	ERJ6GEYJ152V	1.5K 1/10W	[M]
R5730	ERJ3GEYJ823V	82K 1/16W	[M]
R5731	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5732	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5733	ERDS1FVJ182T	1.8K 1/2W	[M]
R5734	ERDS1FVJ182T	1.8K 1/2W	[M]
R5735	ERJ3GEY0R00V	0 1/16W	[M]
R5736	ERDS1FVJ102T	1K 1/2W	[M]
R5737	ERJ3GEYJ100V	10 1/16W	[M]
R5738	ERJ3GEYJ153V	15K 1/16W	[M]
R5739	ERJ3GEYJ103V	10K 1/16W	[M]
R5740	ERJ3GEYF104V	100K 1/16W	[M]
R5741	ERJ3GEYJ102V	1K 1/16W	[M]
R5742	ERJ3GEYJ103V	10K 1/16W	[M]
R5743	ERJ3GEYJ103V	10K 1/16W	[M]
R5744	ERJ3GEYJ153V	15K 1/16W	[M]
R5745	ERJ3GEYJ103V	10K 1/16W	[M]
R5746	ERJ3GEYJ473V	47K 1/16W	[M]
R5747	ERJ3GEYJ103V	10K 1/16W	[M]
R5748	ERJ3GEYJ103V	10K 1/16W	[M]
R5749	ERG2SJ470E	47 2W	[M]
R5750	ERJ3GEYJ331V	330 1/16W	[M]
R5751	ERDS1TJ474	470K 1/2W	[M]
R5752	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5753	ERJ3GEYJ331V	330 1/16W	[M]
R5755	ERJ3GEYJ103V	10K 1/16W	[M]
R5756	ERJ3GEYJ103V	10K 1/16W	[M]
R5757	ERJ3GEYJ103V	10K 1/16W	[M]
R5758	ERJ3GEYJ335V	3.3M 1/16W	[M]
R5759	ERJ3GEYJ104V	100K 1/16W	[M]
R5760	ERJ3GEYJ103V	10K 1/16W	[M]
R5761	ERG2SJ470E	47 2W	[M]
R5762	ERG2SJ470E	47 2W	[M]
R5763	ERJ3GEYF222V	2.2K 1/16W	[M]
R5764	ERG2SJ470E	47 2W	[M]
R5765	ERJ3GEYF223V	22K 1/16W	[M]
R5766	ERJ3GEYF182V	1.8K 1/16W	[M]
R5768	ERJ3GEYJ103V	10K 1/16W	[M]
R5769	ERJ3GEYJ103V	10K 1/16W	[M]
R5770	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5771	ERJ6GEYJ100V	10 1/10W	[M]
R5772	ERDS1FVJ4R7T	4.7 1/2W	[M]
R5773	ERG2SJ470E	47 2W	[M]
R5774	ERDS1FVJ4R7T	4.7 1/2W	[M]
R5775	ERJ3GEYJ103V	10K 1/16W	[M]
R5776	ERJ3GEYJ331V	330 1/16W	[M]
R5777	ERJ3GEYJ102V	1K 1/16W	[M]
R5778	ERDS1FVJ4R7T	4.7 1/2W	[M]
R5779	ERJ3GEYJ102V	1K 1/16W	[M]
R5780	ERJ3GEYJ331V	330 1/16W	[M]
R5781	ERJ3GEYJ103V	10K 1/16W	[M]
R5782	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5783	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5784	ERJ8GEYJ394V	390K 1/8W	[M]
R5785	ERJ8GEYJ394V	390K 1/8W	[M]
R5786	ERJ3GEYJ104V	100K 1/16W	[M]
R5787	ERJ3GEYJ681V	680 1/16W	[M]
R5788	ERJ3GEYJ103V	10K 1/16W	[M]
R5789	ERJ3GEYJ103V	10K 1/16W	[M]
R5790	ERJ3GEYJ102V	1K 1/16W	[M]
R5791	ERG2SJ332E	3.3K 2W	[M]
R5792	ERG2SJ332E	3.3K 2W	[M]
R5793	ERJ3GEY0R00V	0 1/16W	[M]
R5794	ERG2SJ332E	3.3K 2W	[M]
R5795	ERG2SJ332E	3.3K 2W	[M]
R5796	ERJ3GEYJ103V	10K 1/16W	[M]
R5797	ERJ3GEYF473V	47K 1/16W	[M]
R5798	D0C18R2JA020	8.2 1W	[M]
R5799	ERJ3GEYJ1R0V	1 1/16W	[M]
R5901	ERJ3GEY0R00V	0 1/16W	[M]
R5902	ERJ3GEY0R00V	0 1/16W	[M]
R5913	ERJ6GEYJ470V	47 1/10W	[M]
R5916	ERJ3GEYJ151V	150 1/16W	[M]
R5917	ERJ3GEYJ472V	4.7K 1/16W	[M]
R5930	ERJ3GEYJ103V	10K 1/16W	[M]
R5931	ERJ3GEYJ103V	10K 1/16W	[M]
R5932	ERJ3GEYJ103V	10K 1/16W	[M]
R5933	ERJ3GEYJ562V	5.6K 1/16W	[M]
R5934	ERJ3GEYJ103V	10K 1/16W	[M]
R6801	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6802	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6803	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6804	ERJ3GEYJ102V	1K 1/16W	[M]
R6805	ERJ3GEYJ102V	1K 1/16W	[M]
R6807	ERJ3GEYJ223V	22K 1/16W	[M]
R6809	ERJ3GEYJ223V	22K 1/16W	[M]
R6810	ERJ3GEYJ682V	6.8K 1/16W	[M]
R6812	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6914	ERJ3GEYJ563V	56K 1/16W	[M]
R6916	ERJ3GEYJ680V	68 1/16W	[M]
R6917	ERJ3GEYJ680V	68 1/16W	[M]
R6918	ERJ3GEYJ223V	22K 1/16W	[M]
R6922	ERJ3GEYJ102V	1K 1/16W	[M]
R6923	ERJ3GEYJ102V	1K 1/16W	[M]
R6924	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6925	ERJ3GEYJ182V	1.8K 1/16W	[M]
R6926	ERJ3GEYJ222V	2.2K 1/16W	[M]
R6927	ERJ3GEYJ680V	68 1/16W	[M]
R6928	ERJ3GEYJ272V	2.7K 1/16W	[M]
R6934	ERJ3GEYJ470V	47 1/16W	[M]
R6935	ERJ3GEYJ100V	10 1/16W	[M]
R6939	ERJ3GEYJ1R0V	1 1/16W	[M]
R6940	ERJ3GEYJ1R0V	1 1/16W	[M]
R6946	ERJ3GEYJ221V	220 1/16W	[M]
R6947	ERJ3GEYJ472V	4.7K 1/16W	[M]
R6948	ERJ3GEYJ102V	1K 1/16W	[M]
R6949	ERJ3GEYJ102V	1K 1/16W	[M]
R6950	ERJ3GEYJ473V	47K 1/16W	[M]
R6951	ERJ3GEYJ473V	47K 1/16W	[M]
R6957	ERJ3GEYJ221V	220 1/16W	[M]
R6958	ERJ3GEYJ101V	100 1/16W	[M]
R6959	ERJ3GEYJ103V	10K 1/16W	[M]
R6960	ERJ3GEYJ222V	2.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R8003	ERJ2GEJ473X	47K 2W	[M]
R8011	ERJ2GEJ220X	22 2W	[M]
R8012	ERJ2GEJ220X	22 2W	[M]
R8013	ERJ2GEJ220X	22 2W	[M]
R8041	ERJ2GEJ330X	33 2W	[M]
R8153	ERJ2RHD621X	620 2W	[M]
R8154	ERJ2RHD102X	1K 2W	[M]
R8211	ERJ2GEJ103X	10K 2W	[M]
R8221	ERJ2GEJ822X	8.2K 2W	[M]
R8225	ERJ2GEJ822X	8.2K 2W	[M]
R8230	ERJ2GEJ222X	2.2K 2W	[M]
R8231	ERJ2GEJ223X	22K 2W	[M]
R8232	ERJ2GEJ752X	7.5K 2W	[M]
R8251	ERJ6GEYJ6R8V	6.8 1/10W	[M]
R8261	ERJ2GEJ823X	82K 2W	[M]
R8262	ERJ2GEJ153X	15K 2W	[M]
R8263	ERJ2GEJ823X	82K 2W	[M]
R8264	ERJ2GEJ153X	15K 2W	[M]
R8311	ERJ2RHD242X	2.4K 2W	[M]
R8312	ERJ2RHD102X	1K 2W	[M]
R8313	ERJ2RHD912X	9.1K 2W	[M]
R8314	ERJ2GEOR00X	0 2W	[M]
R8321	ERJ3RED680V	68 3W	[M]
R8322	ERJ3GEY0R00V	0 1/16W	[M]
R8325	ERJ3RED680V	68 3W	[M]
R8326	ERJ3GEY0R00V	0 1/16W	[M]
R8331	ERJ3RED680V	68 3W	[M]
R8332	ERJ3GEY0R00V	0 1/16W	[M]
R8335	ERJ3RED680V	68 3W	[M]
R8341	ERJ3RED680V	68 3W	[M]
R8401	ERJ2GEJ101X	100 2W	[M]
R8420	ERJ2GEJ222X	2.2K 2W	[M]
R8421	ERJ2GEOR00X	0 2W	[M]
R8531	ERJ2GEJ152X	1.5K 2W	[M]
R8532	ERJ2GEJ222X	2.2K 2W	[M]
R8533	ERJ2GEOR00X	0 2W	[M]
R8541	ERJ2GEJ153X	15K 2W	[M]
R8551	ERJ2GEOR00X	0 2W	[M]
R8552	ERJ2GEJ102X	1K 2W	[M]
R8553	ERJ2GEJ102X	1K 2W	[M]
R8554	ERJ2GEJ680X	68 2W	[M]
R8555	ERJ2GEJ2R2X	2.2 2W	[M]
R8556	ERJ3GEYJ560V	56 1/16W	[M]
R8557	ERJ3GEYJ510V	51 1/16W	[M]
R8558	ERJ2GEJ473X	47K 2W	[M]
R8559	ERJ2GEJ153X	15K 2W	[M]
R8561	ERJ2GEOR00X	0 2W	[M]
R8562	ERJ2GEJ102X	1K 2W	[M]
R8563	ERJ2GEJ102X	1K 2W	[M]
R8564	ERJ2GEJ220X	22 2W	[M]
R8565	ERJ2GEJ2R2X	2.2 2W	[M]
R8566	ERJ3GEYJ560V	56 1/16W	[M]
R8567	ERJ3GEYJ510V	51 1/16W	[M]
R8568	ERJ2GEJ473X	47K 2W	[M]
R8601	ERJ2GEJ104X	100K 2W	[M]
R8611	ERJ2GEJ101X	100 2W	[M]
R8621	ERJ2GEJ105X	1M 2W	[M]
R8622	ERJ2RHD681X	680 2W	[M]
RX3701	D1H410120001	CHIP RESISTOR	[M]
RX3702	D1H81014A024	CHIP RESISTOR	[M]
RX3703	D1H81014A024	CHIP RESISTOR	[M]
RX3704	D1H81014A024	CHIP RESISTOR	[M]
RX3705	D1H81014A024	CHIP RESISTOR	[M]
RX3706	D1H410120001	CHIP RESISTOR	[M]
RX3707	D1H84714A024	CHIP RESISTOR	[M]
RX3708	D1H84714A024	CHIP RESISTOR	[M]
RX3902	D1H410120001	CHIP RESISTOR	[M]
RX8001	D1H410320002	CHIP RESISTOR	[M]
RX8011	D1H88204A024	CHIP RESISTOR	[M]
RX8012	D1H88204A024	CHIP RESISTOR	[M]
RX8013	D1H88204A024	CHIP RESISTOR	[M]
RX8014	D1H88204A024	CHIP RESISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W6960	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6961	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6962	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6963	ERJ3GEY0R00V	CHIP JUMPER	[M]
		WIRES	
FC9101	RWJ4906082SS	WIRE 6P	[M]
W2901	REEX0542	WIRE 3P (REG TO MAIN)	[M]
W2902	REEX0541	WIRE 3P (REG TO MAIN)	[M]
K2100	ERJ3GEY0R00V	CHIP JUMPER	[M]
K2200	ERJ3GEY0R00V	CHIP JUMPER	[M]
K2300	ERJ3GEY0R00V	CHIP JUMPER	[M]
K2400	ERJ3GEY0R00V	CHIP JUMPER	[M]
K3702	ERJ3GEY0R00V	CHIP JUMPER	[M]
K3903	ERJ3GEY0R00V	CHIP JUMPER	[M]
K3905	ERJ2GE0R00X	CHIP JUMPER	[M]
K5001	ERJ3GEY0R00V	CHIP JUMPER	[M]
K8251	ERJ3GEY0R00V	CHIP JUMPER	[M]
K8321	ERJ2GE0R00X	CHIP JUMPER	[M]
K8325	ERJ2GE0R00X	CHIP JUMPER	[M]
K8331	ERJ2GE0R00X	CHIP JUMPER	[M]
K8335	ERJ2GE0R00X	CHIP JUMPER	[M]
K8341	ERJ2GE0R00X	CHIP JUMPER	[M]
		CAPACITORS	
C2001	ECEA1CKS470I	47 16V	[M]
C2002	ECJ1VB1C104K	0.1 16V	[M]
C2003	ECEA1EKS220B	22 25V	[M]
C2004	ECJ1VB1H103K	0.01 50V	[M]
C2006	ECEA1HKS2R2B	2.2 50V	[M]
C2007	ECJ1VB1C104K	0.1 16V	[M]
C2008	ECEA0JKS101B	100 6.3V	[M]
C2009	ECJ1VB1C104K	0.1 16V	[M]
C2010	ECJ1VB1H331K	330P 50V	[M]
C2011	ECJ1VB1H331K	330P 50V	[M]
C2012	ECJ1VB1H331K	330P 50V	[M]
C2013	ECJ1VB1H223K	0.022 50V	[M]
C2016	ECEA1CKS470I	47 16V	[M]
C2017	ECJ1VB1H103K	0.01 50V	[M]
C2018	ECEA1CKS470I	47 16V	[M]
C2019	ECEA1CKS470I	47 16V	[M]
C2020	ECJ1VB1H103K	0.01 50V	[M]
C2021	ECA1AAD221XI	220 10V	[M]
C2022	ECA1AAD221XI	220 10V	[M]
C2023	ECJ1VB1H221K	220P 50V	[M]
C2024	ECJ1VB1H221K	220P 50V	[M]
C2026	ECEA1CKS100I	10 16V	[M]
C2027	ECJ1VB1C104K	0.1 16V	[M]
C2028	ECJ1VB1C104K	0.1 16V	[M]
C2029	ECJ1VB1H471K	470P 50V	[M]
C2030	ECJ1VB1H471K	470P 50V	[M]
C2101	ECJ1VB1A105K	1 10V	[M]
C2111	ECJ1VB1A105K	1 10V	[M]
C2112	ECJ1VB1H471K	470P 50V	[M]
C2114	ECJ1VB1H562K	5600P 50V	[M]
C2115	ECJ1VB1H331K	330P 50V	[M]
C2117	ECJ1VB1C104K	0.1 16V	[M]
C2118	ECJ1VB1C104K	0.1 16V	[M]
C2119	ECJ1VB1A105K	1 10V	[M]
C2120	ECJ1VB1C473K	0.047 16V	[M]
C2121	ECJ1VB1C104K	0.1 16V	[M]
C2161	ECJ1VB1C393K	0.039 16V	[M]
C2162	ECJ1VB1H332K	3300P 50V	[M]
C2164	ECJ1VB1H102K	1000P 50V	[M]
C2169	ECJ1VB1H103K	0.01 50V	[M]
C2170	ECEA1HKS010B	1 50V	[M]
C2171	ECEA1EKS4R7B	4.7 25V	[M]
C2172	ECJ1VB1H681K	680P 50V	[M]
C2177	ECEA1HKS010I	1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2178	ECJ1VC1H101J	100P 50V	[M]
C2179	ECJ1VC1H470J	47P 50V	[M]
C2180	ECJ1VB1C104K	0.1 16V	[M]
C2181	ECJ1VB1H102K	1000P 50V	[M]
C2183	ECEA1HKS3R3B	3.3 50V	[M]
C2185	ECJ1VB1A105K	1 10V	[M]
C2186	ECJ1VB1A105K	1 10V	[M]
C2187	ECJ1VB1A105K	1 10V	[M]
C2188	ECJ1VB1A105K	1 10V	[M]
C2190	ECJ1VB1A105K	1 10V	[M]
C2191	ECJ1VC1H101J	100P 50V	[M]
C2193	ECJ1VB1C104K	0.1 16V	[M]
C2194	ECJ1VB1H222K	2200P 50V	[M]
C2201	ECJ1VB1A105K	1 10V	[M]
C2211	ECJ1VB1A105K	1 10V	[M]
C2212	ECJ1VB1H471K	470P 50V	[M]
C2214	ECJ1VB1H562K	5600P 50V	[M]
C2215	ECJ1VB1H331K	330P 50V	[M]
C2217	ECJ1VB1C104K	0.1 16V	[M]
C2218	ECJ1VB1C104K	0.1 16V	[M]
C2219	ECJ1VB1A105K	1 10V	[M]
C2220	ECJ1VB1C473K	0.047 16V	[M]
C2221	ECJ1VB1C104K	0.1 16V	[M]
C2261	ECJ1VB1C393K	0.039 16V	[M]
C2262	ECJ1VB1H332K	3300P 50V	[M]
C2264	ECJ1VB1H102K	1000P 50V	[M]
C2270	ECEA1HKS010B	1 50V	[M]
C2272	ECJ1VB1H681K	680P 50V	[M]
C2277	ECEA1HKS010I	1 50V	[M]
C2278	ECJ1VC1H101J	100P 50V	[M]
C2279	ECJ1VC1H470J	47P 50V	[M]
C2280	ECJ1VB1C104K	0.1 16V	[M]
C2281	ECJ1VB1H102K	1000P 50V	[M]
C2283	ECEA1HKS3R3B	3.3 50V	[M]
C2285	ECJ1VB1A105K	1 10V	[M]
C2286	ECJ1VB1A105K	1 10V	[M]
C2287	ECJ1VB1A105K	1 10V	[M]
C2288	ECJ1VB1A105K	1 10V	[M]
C2290	ECJ1VB1A105K	1 10V	[M]
C2291	ECJ1VC1H101J	100P 50V	[M]
C2293	ECJ1VB1C104K	0.1 16V	[M]
C2294	ECJ1VB1H222K	2200P 50V	[M]
C2300	ECJ1VB1A105K	1 10V	[M]
C2301	ECJ2YB0J475K	4.7 6.3V	[M]
C2302	ECJ1VB1C393K	0.039 16V	[M]
C2303	ECJ1VB1C104K	0.1 16V	[M]
C2304	ECEA1CKS100I	10 16V	[M]
C2305	ECJ1VB1H332K	3300P 50V	[M]
C2306	ECJ1VB1A154K	0.15 10V	[M]
C2307	ECEA1CKS100I	10 16V	[M]
C2308	ECJ1VB1H223K	0.022 50V	[M]
C2309	ECJ1VB1C823K	0.082 16V	[M]
C2312	ECEA1HKS3R3B	3.3 50V	[M]
C2323	ECJ1VB1H471K	470P 50V	[M]
C2324	ECJ1VB1H272K	2700P 50V	[M]
C2400	ECJ1VB1A105K	1 10V	[M]
C2401	ECJ2YB0J475K	4.7 6.3V	[M]
C2402	ECJ1VB1C393K	0.039 16V	[M]
C2403	ECJ1VB1C104K	0.1 16V	[M]
C2404	ECEA1CKS100I	10 16V	[M]
C2405	ECJ1VB1H332K	3300P 50V	[M]
C2406	ECJ1VB1A154K	0.15 10V	[M]
C2407	ECEA1CKS100I	10 16V	[M]
C2408	ECJ1VB1H223K	0.022 50V	[M]
C2412	ECEA1HKS3R3B	3.3 50V	[M]
C2423	ECJ1VB1H471K	470P 50V	[M]
C2424	ECJ1VB1H272K	2700P 50V	[M]
C2500	ECJ1VB1A105K	1 10V	[M]
C2501	ECEA1CKS100I	10 16V	[M]
C2502	ECJ1VB1C333K	0.033 16V	[M]
C2503	ECJ1VB1C823K	0.082 16V	[M]
C2506	ECEA1HKS010B	1 50V	[M]
C2507	ECJ1VB1H471K	470P 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2509	ECJ1VB1H222K	2200P 50V	[M]
C2600	ECJ1VB1A105K	1 10V	[M]
C2601	ECJ1VB1H473K	0.047 50V	[M]
C2602	ECEA1EKS4R7B	4.7 25V	[M]
C2603	ECJ1VB1A105K	1 10V	[M]
C2604	ECJ1VB1C104K	0.1 16V	[M]
C2605	ECJ1VB1A474K	0.47 10V	[M]
C2606	ECEA1CKS100I	10 16V	[M]
C2607	ECEA1EKS220B	22 25V	[M]
C2608	ECEA1CKS100I	10 16V	[M]
C2609	ECJ1VB1A334K	0.33 10V	[M]
C2610	ECJ1VB1A474K	0.47 10V	[M]
C2611	ECJ1VB1H123K	0.012 50V	[M]
C2612	ECJ1VB1H332K	3300P 50V	[M]
C2615	ECJ1VB1H222K	2200P 50V	[M]
C2617	ECJ1VB1A124K	0.12 10V	[M]
C2618	ECEA1EKS4R7B	4.7 25V	[M]
C2619	ECEA1HKA100B	10 50V	[M]
C2620	ECJ1VC1H101J	100P 50V	[M]
C2621	ECJ1VB1C104K	0.1 16V	[M]
C2801	ECJ1VB1C104K	0.1 16V	[M]
C2802	ECEA0JKS101B	100 6.3V	[M]
C2803	ECEA0JKS101B	100 6.3V	[M]
C2804	ECEA0JKS101B	100 6.3V	[M]
C2805	ECEA0JKS101B	100 6.3V	[M]
C2806	ECEA0JKS101B	100 6.3V	[M]
C2807	ECJ1VB1H103K	0.01 50V	[M]
C2808	ECA1AAD221XI	220 10V	[M]
C2809	ECEA1EKS220B	22 25V	[M]
C2810	ECJ1VB1H103K	0.01 50V	[M]
C2811	ECJ1VB1C104K	0.1 16V	[M]
C2812	ECJ1VB1C104K	0.1 16V	[M]
C2814	ECEA1EKS220B	22 25V	[M]
C2815	ECEA1EKS220B	22 25V	[M]
C2816	ECEA1EKS220B	22 25V	[M]
C2817	ECJ1VB1A105K	1 10V	[M]
C2818	ECJ1VB1A105K	1 10V	[M]
C2819	ECJ1VC1H101J	100P 50V	[M]
C2820	ECJ1VC1H101J	100P 50V	[M]
C2821	ECJ1VC1H101J	100P 50V	[M]
C2822	ECJ1VC1H101J	100P 50V	[M]
C2823	ECJ1VC1H101J	100P 50V	[M]
C2825	ECJ1VC1H101J	100P 50V	[M]
C2826	ECJ1VC1H101J	100P 50V	[M]
C2827	ECJ1VC1H101J	100P 50V	[M]
C2828	ECJ1VC1H101J	100P 50V	[M]
C2829	ECJ1VC1H101J	100P 50V	[M]
C2830	ECJ1VC1H101J	100P 50V	[M]
C2832	ECJ1VB1H221K	220P 50V	[M]
C2833	ECJ1VB1H104K	0.1 50V	[M]
C2834	ECEA1EKS220B	22 25V	[M]
C2835	ECEA1EKS220B	22 25V	[M]
C2836	ECJ1VB1C104K	0.1 16V	[M]
C2837	ECJ1VB1C104K	0.1 16V	[M]
C2838	ECJ1VB1C104K	0.1 16V	[M]
C2839	ECJ1VB1C104K	0.1 16V	[M]
C2901	ECJ1VB1H104K	0.1 50V	[M]
C2902	ECJ1VB1H104K	0.1 50V	[M]
C2903	ECJ1VB1H104K	0.1 50V	[M]
C2904	ECJ1VB1H104K	0.1 50V	[M]
C2905	ECJ1VB1H104K	0.1 50V	[M]
C2906	ECJ1VB1H103K	0.01 50V	[M]
C2908	ECEA1CKA101B	100 16V	[M]
C2910	ECJ1VB1H103K	0.01 50V	[M]
C2913	ECEA1CKA101B	100 16V	[M]
C2914	ECEA1AKA330B	33 10V	[M]
C2917	ECJ1VB1H104K	0.1 50V	[M]
C2918	ECA1CAK470XB	47 16V	[M]
C2919	ECJ1VC1H101J	100P 50V	[M]
C2920	ECJ1VB1H103K	0.01 50V	[M]
C2921	ECA1EM221B	220 25V	[M]
C2922	EEUFC0J821B	820P 6.3V	[M]
C2923	ECEA1CKA101B	100 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2925	ECA0JAK221XB	220 6.3V	[M]
C2926	ECJ1VB1C104K	0.1 16V	[M]
C2927	ECEA1CKA101B	100 16V	[M]
C2929	ECA0JAK221XB	220 6.3V	[M]
C2930	ECJ1VB1A105K	1 10V	[M]
C2931	ECA0JAK221XB	220 6.3V	[M]
C2932	ECEA1CKA101B	100 16V	[M]
C2940	ECJ1VB1H104K	0.1 50V	[M]
C2941	ECEA1CKA470B	47 16V	[M]
C2942	ECJ1VB1H103K	0 16V	[M]
C2944	EEUFC0J821B	820P 6.3V	[M]
C2945	ECJ1VB1H103K	0.01 50V	[M]
C2946	ECEA1CKA101B	100 16V	[M]
C2950	ECJ1VB1C104K	0.1 16V	[M]
C2951	ECJ1VB1C104K	0.1 16V	[M]
C2952	ECJ1VB1H103K	0.01 50V	[M]
C2953	ECJ1VB1H103K	0.01 50V	[M]
C2954	ECJ1VB1H103K	0.01 50V	[M]
C2955	ECJ1VB1H103K	0.01 50V	[M]
C2956	ECJ1VB1H103K	0.01 50V	[M]
C2957	ECJ1VB1H103K	0.01 50V	[M]
C2958	ECJ1VB1H103K	0.01 50V	[M]
C2960	ECJ1VB1A105K	1 10V	[M]
C2962	ECEA1CKA101B	100 16V	[M]
C2963	EEUFC1C471B	470P 16V	[M]
C2964	ECJ1VB1H103K	0.01 50V	[M]
C2965	ECJ1VB1H103K	0.01 50V	[M]
C2966	ECJ1VB1H103K	0.01 50V	[M]
C2967	ECJ1VB1H103K	0.01 50V	[M]
C2968	ECEA1CKA101B	100 16V	[M]
C2969	ECEA1CKA101B	100 16V	[M]
C3701	EEE0GA331WP	330P 4V	[M]
C3702	ECJ0EB1A104K	0.1 10V	[M]
C3703	ECJ0EB1A104K	0.1 10V	[M]
C3704	ECJ1VB0J105K	1 6.3V	[M]
C3705	ECJ0EB1A104K	0.1 10V	[M]
C3706	ECJ1VB0J105K	1 6.3V	[M]
C3707	ECJ1VB0J105K	1 6.3V	[M]
C3708	ECJ0EB1A104K	0.1 10V	[M]
C3709	ECJ0EB1A104K	0.1 10V	[M]
C3710	ECJ1VB0J105K	1 6.3V	[M]
C3711	ECJ0EB1A104K	0.1 10V	[M]
C3712	ECJ1VB0J105K	1 6.3V	[M]
C3713	ECJ0EB1A104K	0.1 10V	[M]
C3714	ECJ1VB0J105K	1 6.3V	[M]
C3715	ECJ1VB0J105K	1 6.3V	[M]
C3716	ECJ0EB1A104K	0.1 10V	[M]
C3717	ECJ0EB1A104K	0.1 10V	[M]
C3718	ECJ1VB0J105K	1 6.3V	[M]
C3719	ECJ1VB0J105K	1 6.3V	[M]
C3720	ECJ0EB1A104K	0.1 10V	[M]
C3721	ECJ0EB1A104K	0.1 10V	[M]
C3722	ECJ1VB0J105K	1 6.3V	[M]
C3723	FIJ0J4750002	4.7 6.3V	[M]
C3784	ECJ0EB1A104K	0.1 10V	[M]
C3785	ECJ0EB1C103K	0.01 16V	[M]
C3786	ECJ1VB0J105K	1 6.3V	[M]
C3901	EEE0GA331WP	330P 4V	[M]
C3902	EEE0GA331WP	330P 4V	[M]
C3903	ECJ0EB1A104K	0.1 10V	[M]
C3904	ECJ0EB1A104K	0.1 10V	[M]
C3905	ECJ0EB1A104K	0.1 10V	[M]
C3906	ECJ1VB0J105K	1 6.3V	[M]
C3907	ECJ0EB1A104K	0.1 10V	[M]
C3908	ECJ0EB1E102K	1000P 25V	[M]
C3909	ECJ0EB1E102K	1000P 25V	[M]
C3910	ECJ0EB1E102K	1000P 25V	[M]
C3911	ECJ0EB1A104K	0.1 10V	[M]
C3912	ECJ0EB1E102K	1000P 25V	[M]
C3913	ECJ0EB1A104K	0.1 10V	[M]
C3914	ECJ1VB0J105K	1 6.3V	[M]
C3915	ECJ0EB1A104K	0.1 10V	[M]
C3916	ECJ0EB1A104K	0.1 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C3917	ECJ1VB0J105K	1 6.3V	[M]
C3931	ECJ0EF1C104Z	0.1 16V	[M]
C3954	ECJ0EF1C104Z	0.1 16V	[M]
C3955	ECJ0EB1C103K	0.01 16V	[M]
C3956	ECJ1VB0J105K	1 6.3V	[M]
C3964	ECJ0EB1A104K	0.1 10V	[M]
C5001	ECEA1CKA101B	100 16V	[M]
C5002	ECEA1CKA101B	100 16V	[M]
C5003	ECEA1CKA101B	100 16V	[M]
C5011	ECJ1VB1H104K	0.1 50V	[M]
C5012	ECJ1VB1H103K	0.01 50V	[M]
C5013	ECJ1VB1H103K	0.01 50V	[M]
C5014	ECJ1VC1H101K	100P 50V	[M]
C5015	ECJ1VB1H391K	390P 50V	[M]
C5016	ECJ1VC1H101K	100P 50V	[M]
C5017	ECJ1VB1H391K	390P 50V	[M]
C5018	ECJ1VC1H470J	47P 50V	[M]
C5019	ECJ1VC1H470J	47P 50V	[M]
C5020	ECJ1VB1H104K	0.1 50V	[M]
C5021	F2A1C5600011	56P 16V	[M]
C5022	ECA1CAK470XB	47 16V	[M]
C5025	F2A1C5600011	56P 16V	[M]
C5027	F2A1J221A053	220P 63V	[M]
C5028	F2A1J221A053	220P 63V	[M]
C5029	F2A1J470A050	47P 63V	[M]
C5030	F2A1J470A050	47P 63V	[M]
C5031	ECEA1HKA100B	10 50V	[M]
C5033	ECJ1VB1H104K	0.1 50V	[M]
C5035	ECJ1VB1H104K	0.1 50V	[M]
C5036	ECJ1VB1H104K	0.1 50V	[M]
C5040	ECJ1VB1H104K	0.1 50V	[M]
C5062	ECA1CAK100XB	10 16V	[M]
C5063	ECA1CAK100XB	10 16V	[M]
C5066	ECJ1VB1H102K	1000P 50V	[M]
C5067	ECJ1VB1H102K	1000P 50V	[M]
C5071	F2A1V3300027	33P 35V	[M]
C5072	F2A1V3300027	33P 35V	[M]
C5073	ECJ1VB1H104K	0.1 50V	[M]
C5074	ECJ1VB1H104K	0.1 50V	[M]
C5075	F2A1V4710036	470P 35V	[M]
C5076	F2A1V4710036	470P 35V	[M]
C5077	F2A1V4710036	470P 35V	[M]
C5078	F2A1V4710036	470P 35V	[M]
C5096	ECA0JAK101XB	100 6.3V	[M]
C5097	ECEA1HKA100B	10 50V	[M]
C5098	ECJ1VB1H102K	1000P 50V	[M]
C5099	ECJ1VB1H103K	0.01 50V	[M]
C5101	ECJ1VB1H102K	1000P 50V	[M]
C5113	ECQV1H684JL3	0.68 50V	[M]
C5115	ECQV1H684JL3	0.68 50V	[M]
C5130	ECJ1VC1H101K	100P 50V	[M]
C5181	ECJ1VB1H104K	0.1 50V	[M]
C5183	ECJ1VB1H104K	0.1 50V	[M]
C5201	ECJ1VB1H102K	1000P 50V	[M]
C5230	ECJ1VC1H101K	100P 50V	[M]
C5301	ECJ1VB1H102K	1000P 50V	[M]
C5305	ECJ1VB0J474K	0.47 6.3V	[M]
C5317	ECQV1H684JL3	0.68 50V	[M]
C5318	ECQV1H684JL3	0.68 50V	[M]
C5386	ECJ1VB1H104K	0.1 50V	[M]
C5401	ECJ1VB1H102K	1000P 50V	[M]
C5406	ECJ1VB0J474K	0.47 6.3V	[M]
C5430	ECJ1VC1H101K	100P 50V	[M]
C5431	ECJ1VC1H101K	100P 50V	[M]
C5487	ECJ1VB1H104K	0.1 50V	[M]
C5501	ECJ1VB1H102K	1000P 50V	[M]
C5502	ECJ1VC1H101K	100P 50V	[M]
C5504	ECA1HAK2R2XB	2.2 50V	[M]
C5510	ECQE1684KF	0.68 100V	[M]
C5512	ECQE1684KF	0.68 100V	[M]
C5530	ECJ1VC1H101K	100P 50V	[M]
C5531	ECJ1VC1H101K	100P 50V	[M]
C5532	ECJ1VB1H104K	0.1 50V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C5601	ECJ1VB1H102K	1000P 50V	[M]
C5602	ECJ1VC1H101K	100P 50V	[M]
C5603	ECA1HAK2R2XB	2.2 50V	[M]
C5609	ECQE1684KF	0.68 100V	[M]
C5611	ECQE1684KF	0.68 100V	[M]
C5630	ECJ1VC1H101K	100P 50V	[M]
C5631	ECJ1VC1H101K	100P 50V	[M]
C5700	F2B2D8210010	820P 250V	[M]
C5701	ECQU2A224MLC	0.22 100V	[M]
C5702	F1BAF1020020	2P 10V	[M]
C5703	F2A1H100A248	10P 50V	[M]
C5706	ECQU2A224MLC	0.22 100V	[M]
C5708	ECQE2103KF	0.01 250V	[M]
C5709	ECJ1VB1H471K	470P 50V	[M]
C5710	ECQP6332JUB	CAPACITOR	[M]
C5711	F2A1H5600009	56P 50V	[M]
C5712	ECJ1VB1H221K	220P 50V	[M]
C5713	ECJ1VB1H102K	1000P 50V	[M]
C5715	ECA1CAK470XB	47 16V	[M]
C5717	F2A1J182A039	1800P 63V	[M]
C5719	ERJ3GEY0R00V	0 1/16W	[M]
C5720	ECJ1VB1H104K	0.1 50V	[M]
C5721	ECJ1VB1H104K	0.1 50V	[M]
C5722	ECJ1VB1H104K	0.1 50V	[M]
C5723	ECJ1VB1H104K	0.1 50V	[M]
C5725	ECA1HAK2R2XB	2.2 50V	[M]
C5727	ECCN3A470KGE	47P 1000	[M]
C5729	ECA1HAK220XB	22 50V	[M]
C5732	ECJ1VB1H104K	0.1 50V	[M]
C5733	ECA1CAK221XB	220 16V	[M]
C5736	F1BAF3920009	2200P 10V	[M]
C5737	F1BAF3920009	2200P 10V	[M]
C5738	ECJ1VB1H681K	680P 50V	[M]
C5741	F2A1V222A061	2200P 35V	[M]
C5742	F2A1V222A061	2200P 35V	[M]
C5743	F2A1V4710036	470P 35V	[M]
C5754	ECJ1VB1H104K	0.1 50V	[M]
C5755	ECA1CAK220XB	22 16V	[M]
C5756	ECJ1VB1H103K	0.01 50V	[M]
C5757	ECJ1VB1H103K	0.01 50V	[M]
C5761	ECJ1VB1H223K	0.022 50V	[M]
C5764	ECJ1VB1H103K	0.01 50V	[M]
C5771	ECJ1VB1H104K	0.1 50V	[M]
C5780	F1B2H103A060	0.01 500V	[M]
C5781	F1B2H103A060	0.01 500V	[M]
C5782	F1B2H103A060	0.01 500V	[M]
C5783	F1B2H103A060	0.01 500V	[M]
C5784	F1J2E1030004	0.01 250V	[M]
C5785	F1J2E1030004	0.01 250V	[M]
C5790	ECJ1VB1H102K	1000P 50V	[M]
C5791	ECA1HM101B	100 50V	[M]
C5792	ECA0JAK221XB	220 6.3V	[M]
C5794	ECA1CAK330XB	33 16V	[M]
C5795	ECJ1VB1H104K	0.1 50V	[M]
C5796	ECA1HAK2R2XB	2.2 50V	[M]
C5797	ECA1CAK100XB	10 16V	[M]
C5798	ECA1VM471B	470 35V	[M]
C5800	ECA1CAK221XB	220 16V	[M]
C5913	ECA1VM221B	220 35V	[M]
C5914	ECJ1VB1A105K	1 10V	[M]
C5915	ECJ1VB1H104K	0.1 50V	[M]
C5916	ECEA1HKA101B	100 50V	[M]
C6101	ECJ1VB1H473K	0.047 50V	[M]
C6201	ECJ1VB1H473K	0.047 50V	[M]
C6801	ECJ1VB1H104K	0.1 50V	[M]
C6805	ECJ1VC1H101K	100P 50V	[M]
C6806	ECJ1VC1H101K	100P 50V	[M]
C6903	ECEA1HKA220B	22 50V	[M]
C6904	ECJ1VB1H102K	1000P 50V	[M]
C6905	ECEA1HKA220B	22 50V	[M]
C6906	ECJ1VC1H101K	100P 50V	[M]
C6909	ECJ1VB1H103K	0.01 50V	[M]
C6910	ECEA0JKS101B	100 6.3V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C6911	ECJ1VB1H103K	0.01 50V	[M]
C6913	ECEA1HKS3R3B	3.3 50V	[M]
C6916	ECJ1VC1H101K	100P 50V	[M]
C6917	ECJ1VC1H101K	100P 50V	[M]
C6918	ECEA1AKA470B	47 10V	[M]
C6919	ECJ1VC1H101K	100P 50V	[M]
C6920	ECJ1VB1H331K	330P 50V	[M]
C6921	ECJ1VB1H331K	330P 50V	[M]
C6922	ECJ1VB1H103K	0.01 50V	[M]
C6923	ECJ1VB1H103K	0.01 50V	[M]
C6924	ECJ1VB1H103K	0.01 50V	[M]
C6925	ECJ1VB1H103K	0.01 50V	[M]
C6927	ECJ1VB1C104K	0.1 16V	[M]
C8001	EEE0GA331WP	330P 4V	[M]
C8003	ECJ0EF1C104Z	0.1 16V	[M]
C8004	ECJ0EF1C104Z	0.1 16V	[M]
C8005	ECJ0EF1C104Z	0.1 16V	[M]
C8006	ECJ0EF1C104Z	0.1 16V	[M]
C8007	ECJ0EF1C104Z	0.1 16V	[M]
C8008	ECJ0EF1C104Z	0.1 16V	[M]
C8011	F2G0J101A066	100P 6.3V	[M]
C8012	ECJ0EF1C104Z	0.1 16V	[M]
C8013	ECJ0EF1C104Z	0.1 16V	[M]
C8014	ECJ0EF1C104Z	0.1 16V	[M]
C8015	ECJ0EF1C104Z	0.1 16V	[M]
C8016	ECJ0EF1C104Z	0.1 16V	[M]
C8017	ECJ0EF1C104Z	0.1 16V	[M]
C8018	ECJ0EF1C104Z	0.1 16V	[M]
C8019	ECJ0EF1C104Z	0.1 16V	[M]
C8020	ECJ0EF1C104Z	0.1 16V	[M]
C8021	ECJ0EF1C104Z	0.1 16V	[M]
C8022	ECJ0EF1C104Z	0.1 16V	[M]
C8023	ECJ0EF1C104Z	0.1 16V	[M]
C8024	ECJ0EF1C104Z	0.1 16V	[M]
C8025	ECJ0EF1C104Z	0.1 16V	[M]
C8026	ECJ0EF1C104Z	0.1 16V	[M]
C8051	ECJ1VB0J105K	1 6.3V	[M]
C8052	ECJ0EB1A104K	0.1 10V	[M]
C8053	ECJ0EF1C104Z	0.1 16V	[M]
C8054	ECJ0EC1H221J	220P 50V	[M]
C8055	ECJ1VB0J105K	1 6.3V	[M]
C8056	ECJ0EB1E222K	2200P 25V	[M]
C8057	ECJ1VB0J105K	1 6.3V	[M]
C8111	ECJ0EB1A104K	0.1 10V	[M]
C8112	ECJ1VB0J105K	1 6.3V	[M]
C8113	ECJ0EB1E471K	470P 25V	[M]
C8151	ECJ1VB0J475K	4.7 6.3V	[M]
C8152	ECJ1VB1C105K	1 16V	[M]
C8201	F2G0J101A066	100P 6.3V	[M]
C8202	ECJ0EB1A104K	0.1 10V	[M]
C8203	ECJ0EB1A104K	0.1 10V	[M]
C8211	ECJ0EB1E122K	1200P 25V	[M]
C8221	ECJ0EB1E102K	1000P 25V	[M]
C8222	ECJ0EB1E821K	820P 25V	[M]
C8225	ECJ0EB1E102K	1000P 25V	[M]
C8226	ECJ0EB1E102K	1000P 25V	[M]
C8231	ECJ0EB1A104K	0.1 10V	[M]
C8232	ECJ0EB1A104K	0.1 10V	[M]
C8251	F2G0J221A065	220P 6.3V	[M]
C8252	ECJ0EF1C104Z	0.1 16V	[M]
C8253	ECJ0EF1C104Z	0.1 16V	[M]
C8255	F2G1C220A037	22P 16V	[M]
C8256	ECJ0EF1C104Z	0.1 16V	[M]
C8257	F2G1C470A076	47P 16V	[M]
C8258	ECJ0EF1C104Z	0.1 16V	[M]
C8261	ECJ0EF1C104Z	0.1 16V	[M]
C8262	ECJ0EF1C104Z	0.1 16V	[M]
C8301	F2G0J221A031	220P 6.3V	[M]
C8302	F2G0J330A031	33P 6.3V	[M]
C8303	ECJ0EB1A104K	0.1 10V	[M]
C8304	ECJ0EB1A104K	0.1 10V	[M]
C8305	ECJ0EB1A104K	0.1 10V	[M]
C8306	ECJ0EB1A104K	0.1 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C8311	ECJ0EB1A104K	0.1 10V	[M]
C8312	ECJ1VB0J105K	1 6.3V	[M]
C8313	ECJ1VB0J105K	1 6.3V	[M]
C8401	ECJ0EC1H150J	15P 50V	[M]
C8421	F2G0J101A083	100P 6.3V	[M]
C8422	ECJ0EF1C104Z	0.1 16V	[M]
C8423	F2G0J330A083	33P 6.3V	[M]
C8424	ECJ0EF1C104Z	0.1 16V	[M]
C8426	ECJ0EF1C104Z	0.1 16V	[M]
C8427	ECJ0EF1C104Z	0.1 16V	[M]
C8428	ECJ0EF1C104Z	0.1 16V	[M]
C8501	F2G0J101A031	100P 6.3V	[M]
C8502	ECJ0EF1C104Z	0.1 16V	[M]
C8503	ECJ0EF1C104Z	0.1 16V	[M]
C8504	ECJ0EF1C104Z	0.1 16V	[M]
C8505	ECJ0EF1C104Z	0.1 16V	[M]
C8511	ECJ1VB0J105K	1 6.3V	[M]
C8512	ECJ1VB0J105K	1 6.3V	[M]
C8513	ECJ0EB1A104K	0.1 10V	[M]
C8514	ECJ0EB1A104K	0.1 10V	[M]
C8515	ECJ0EB1A104K	0.1 10V	[M]
C8516	ECJ0EB1A104K	0.1 10V	[M]
C8521	ECJ0EB1A104K	0.1 10V	[M]
C8522	ECJ0EB1A104K	0.1 10V	[M]
C8523	ECJ0EF1C104Z	0.1 16V	[M]
C8524	ECJ0EF1C104Z	0.1 16V	[M]
C8525	ECJ0EB1C562K	5600P 16V	[M]
C8526	ECJ0EB1C183K	0.018 16V	[M]
C8527	ECJ0EB1A333K	0.033 10V	[M]
C8528	ECJ1VB0J105K	1 6.3V	[M]
C8529	ECJ1VB0J105K	1 6.3V	[M]
C8530	ECJ0EF1C104Z	0.1 16V	[M]
C8531	ECJ0EC1H101J	100P 50V	[M]
C8532	ECJ0EC1H221J	220P 50V	[M]
C8533	ECJ0EF1C104Z	0.1 16V	[M]
C8541	ECJ0EB1E472K	4700P 25V	[M]
C8550	F2G0J330A031	33P 6.3V	[M]
C8551	ECJ0EF1C104Z	0.1 16V	[M]
C8552	F2G1C100A072	10P 16V	[M]
C8553	F2G0J470A031	47P 6.3V	[M]
C8554	ECJ1VB0J105K	1 6.3V	[M]
C8561	ECJ0EF1C104Z	0.1 16V	[M]
C8562	F2G1C100A072	10P 16V	[M]
C8563	F2G0J470A031	47P 6.3V	[M]
C8564	ECJ1VB0J105K	1 6.3V	[M]
C8571	ECJ3YB1A106M	10 10V	[M]
C8572	ECJ0EF1C104Z	0.1 16V	[M]
C8601	ECJ0EF1C104Z	0.1 16V	[M]
C8602	ECJ0EB1C153K	0.015 16V	[M]
C8606	ECJ0EF1C104Z	0.1 16V	[M]
C8611	ECJ0EF1C104Z	0.1 16V	[M]
C8621	ECJ0EC1H080D	8P 50V	[M]
C8622	ECJ0EC1H080D	8P 50V	[M]
C8651	ECJ0EF1C104Z	0.1 16V	[M]
C8652	ECJ0EF1C104Z	0.1 16V	[M]
C8691	ECJ0EF1C104Z	0.1 16V	[M]
C8695	ECJ0EF1C104Z	0.1 16V	[M]
C8701	ECJ0EB1A104K	0.1 10V	[M]